

# Western Region Annual HIV Epidemiological Profile

Data reported through June 30, 2019



Center for HIV Surveillance, Epidemiology and Evaluation Infectious Disease Prevention and Health Services Bureau Prevention and Health Promotion Administration http://phpa.health.maryland.gov/OIDEOR/CHSE 1-800-358-9001

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This report was prepared by the following CHSEE staff: Alyssa Arey, Morgan Boyer, James Carrier, Colin Flynn, Molly Gribbin, Trevor Hsu, Amber Lee and Jami Stockdale.

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### Section I - Background Information

### **HIV/AIDS Reporting Requirements**

The Maryland HIV/AIDS Reporting Act of 2007 went into effect on April 24, 2007. The law expanded HIV/AIDS reporting and required that people living with HIV be reported by name. The following highlights the reporting requirements of Health-General Articles 18-201.1, 18-202.1, and 18-205 of the Annotated Code of Maryland, as specified in the Code of Maryland Regulations (COMAR) 10.18.02.

- Physicians are required to report patients in their care with diagnoses of HIV or AIDS immediately to the Local Health Department where the physician's office is located by mailing the Maryland Confidential Morbidity Report (DHMH 1140). Reports are also accepted by phone.
- Physicians are required to report infants born to mothers living with HIV within 48 hours to the Maryland Department of Health by mailing the Maryland Confidential Morbidity Report (DHMH 1140). Reports are also accepted by phone.
- Clinical and infection control practitioners in hospitals, nursing homes, hospice facilities, medical clinics in correctional facilities, inpatient psychiatric facilities, and inpatient drug rehabilitation facilities are required to report patients in the care of the institution with diagnoses of HIV or AIDS within 48 hours to the Local Health Department where the institution is located by mailing the Maryland Confidential Morbidity Report (DHMH 1140). Reports are also accepted by phone. Facilities with large volumes are encouraged to contact the Maryland Department of Health to establish electronic reporting.
- Laboratory directors are required to report patients with laboratory results indicating HIV infection (e.g., positive confirmatory HIV diagnostic tests, all CD4 immunological tests, all HIV viral load tests, and all HIV genotype and phenotype tests) within 48 hours to the Local Health Department where the laboratory is located, or if out of state to the Maryland Department of Health, by mailing the State of Maryland HIV/CD4 Laboratory Reporting Form (DHMH 4492). Laboratories are encouraged to contact the Maryland Department of Health to establish electronic reporting.

Reporting forms and instructions, including mailing addresses and phones numbers, are available on our website: https://phpa.health.maryland.gov/OIDEOR/CHSE/Pages/reporting-material.aspx

### For Assistance with HIV/AIDS Reporting

For assistance with reporting, including establishment of routine, electronic, or other alternate methods of reporting to the Maryland Department of Health, please contact the Center for HIV Surveillance, Epidemiology and Evaluation in the Maryland Department of Health at 410-767-5227.

#### Limitations in the HIV/AIDS Data

This epidemiological profile only contains data for people that have been diagnosed with HIV by a health care provider, were reported to the health department by name, and were residents of Maryland at the time of diagnosis or are current residents of Maryland as of December 31, 2018. Surveillance is the ongoing systematic collection, analysis, interpretation, and dissemination of data. Data are only available for people receiving medical care, often only at facilities in Maryland, and only includes information that has been reported to the health department. Linkage to care data is based solely on laboratory data reported to the health department.

<u>HIV Incidence</u>: The most recent Centers for Disease Control and Prevention (CDC) estimate of the number of people living with undiagnosed HIV infection is 14.2 percent for the United States and 13.8 percent for Maryland in 2016. Using the CDC CD4 depletion model on Maryland surveillance data, the estimated number of people living with undiagnosed HIV infection in Maryland is 11.6 percent in 2017.

<u>Maryland Residence</u>: This epidemiological profile provides estimates of people living with diagnosed HIV in Maryland by their residence as of December 31, 2018. Residence at diagnosis and age at diagnosis are used exclusively to describe new HIV and AIDS diagnoses. Current residence data are restricted to people for which there is a case report form or laboratory test reported since January 1, 2009. Restricting address data to recent years

presents the most accurate data available and helps to account for people that may have moved out of state whose data would no longer be reported in Maryland. However, current residence data excludes people that may still be residents of Maryland but have not received any HIV care during the most recent ten and a half years. In addition, residence is dynamic and people living with diagnosed HIV may have resided at multiple addresses that cannot all be represented in single time point estimates.

<u>Maryland Residence – Correctional Facilities:</u> People living with diagnosed HIV who were reported to be residing in a state or federal prison as of December 31, 2018 will be presented in the Maryland epidemiological profile only. For surveillance purposes, pre- or post-incarceration residential addresses are used for people living with diagnosed HIV who were incarcerated in local jails and detention centers. Individuals diagnosed or previously identified as residing in a correctional facility, whose most recent reported residential address indicates they were not residing in a state/federal correctional facility as of December 31, 2018, are included with estimates of people who are not incarcerated. The movement of persons between Maryland correctional facilities is not reflected in this report.

Gender Identity: This epidemiological profile describes gender expansive people that have been diagnosed with HIV by a health care provider, were reported to the health department by name, and were residents of Maryland at the time of diagnosis or are current residents of Maryland as of December 31, 2018. Historically, it has been difficult to fully present data by gender identity. Data on gender expansive people has been limited in the Maryland Department of Health's Enhanced HIV/AIDS Reporting System (eHARS). No reliable system exists for collecting or reporting gender identity and some agencies do not collect or have complete data on gender identity. This report is likely underreporting the number gender expansive people living with diagnosed HIV because of challenges in accurately identifying and reporting gender identity in HIV surveillance.

<u>Race/Ethnicity</u>: The completeness of reporting for race/ethnicity is variable in surveillance data. Definitions of race/ethnicity categories may vary across agencies and some agencies do not collect or have complete data on race/ethnicity. This report may be overreporting the number of Multiracial people living with diagnosed HIV because of challenges in accurately identifying and reporting race/ethnicity in HIV surveillance.

<u>Foreign-Born Maryland Residents:</u> The completeness of reporting a person's country of birth is variable in surveillance data. Not all agencies collect or have complete data on nativity. In addition, some individuals may immigrate to the U.S. with HIV. HIV testing data from other countries is often unavailable for these people; therefore, they are counted as a new diagnosis following their first HIV related lab test in the United States, even if they were first diagnosed elsewhere.

<u>Mortality:</u> Mortality (death) data is presented in this epidemiological profile. Caution should be exercised when interpreting mortality estimates for recent years due to delays in reporting.

<u>Viral Suppression:</u> In this epidemiological profile, viral suppression is defined as the most recent viral load measured in the specified year of less than 200 copies per milliliter. Estimates of viral suppression among people living with diagnosed HIV are inclusive of people diagnosed in the specified year; therefore, they may not have had sufficient time to engage in HIV care and/or achieve viral suppression.

### Changes in Terminology

The terminology for HIV and AIDS surveillance data was changed from earlier epidemiological profiles to be more precise, with Reported Diagnoses replacing Incidence and People Living with Diagnosed HIV replacing Prevalence. Incidence is a measure of the number of new events (such as HIV infections) in a population during a period of time. Prevalence is a measure of the number of people living with a condition (such as HIV) in a population at a certain time. Prevalence includes both newly and previously diagnosed individuals as well as undiagnosed infections. For HIV, Incidence and Prevalence cannot be directly measured and must be estimated using statistical methods. The HIV surveillance system is able to provide the actual number of diagnoses and deaths that are reported in the population.

For this epidemiological profile, reports received through a certain time (six months after December 31<sup>st</sup> of the specified year) are used to generate the number of diagnoses during the prior years. This lag time allows for delays in reporting and time to complete investigations. Instead of the previous one-year lag, this epidemiological profile utilizes a sixmonth lag, and as a result, data on exposure category and deaths for the prior year are preliminary. For example, the

Reported HIV Diagnoses for 2018 are the total number of people diagnosed with HIV from January 1, 2018 to December 31, 2018, as reported by name through June 30, 2019.

To calculate the number of people living with diagnosed HIV, we count all reported diagnoses from the beginning of the epidemic (all new diagnoses each year) and subtract all reported deaths. For example, the total people living with diagnosed HIV on December 31, 2018 are the total reported HIV diagnoses not reported to have died as of December 31, 2018 as reported by name through June 30, 2019.

### Stages of HIV Surveillance

Untreated HIV disease progresses from HIV infection to AIDS to death. These are biological events that occur whether or not a person receives any medical care. For example, a person can contract HIV but never be screened for HIV and so they do not have an HIV diagnosis. A medical provider diagnoses that these biological events have occurred and records them as a medical event. The law requires medical providers to report these medical events to the health department, thereby creating a surveillance event.

Time Point	Biological Event	Medical Event	Surveillance Event
1	HIV Infection		
2		HIV Diagnosis	
3			HIV Report
4	AIDS Conditions		
5		AIDS Diagnosis	
6			AIDS Report
7	Death		
8		Death Diagnosis	
9			Death Report

An instance of HIV/AIDS can only move through time in one direction, from HIV infection to death report [from time point 1 to time point 9] but may skip over individual stages. Events can occur simultaneously, but usually there is a time lag between them. The time lag between events can be measured in days, months, and years.

For example, the time between HIV infection [time point 1] and the test that diagnoses HIV [time point 2] may be several years, and it may then take several days for the laboratory and physician to report the diagnosis to the health department [time point 3]. In a second example, a person with diagnosed and reported HIV [time point 3] may die [time point 7] without developing AIDS, thereby skipping the three AIDS events (conditions, diagnosis, and report [time points 4, 5 and 6]). And in a third example, a person with undiagnosed HIV infection [time point 1] may become sick, enter the hospital, and die [time point 7] of what is later determined to be AIDS. In that situation, HIV diagnosis [time point 2], AIDS diagnosis [time point 5], and death diagnosis [time point 8] would all occur at the same time, and that would probably be many years after the initial HIV transmission [time point 1].

### Laboratory Data

CD4+ T-lymphocyte tests are measures of a person's immune system function. An adult living with diagnosed HIV is considered to have AIDS if they have less than 200 CD4+ cells per microliter of blood or if the percent of T-Lymphocyte cells that are CD4+ is less than 14 percent. Viral load tests are measures of the amount of HIV in a person's body. The goal of HIV treatment is to have a very low number of copies of virus per milliliter of blood, below what the test can measure, which is called an undetectable level. Low levels of viral load, such as less than 200 copies per milliliter of blood, are known as viral suppression. Treatment recommendations are that a person in HIV medical care should have their CD4 and viral load levels measured regularly, at least once per year. We use the presence of these lab tests as an indicator that someone has been "linked to care" after diagnosis or is "retained in care."

### Sources of Data

Information on HIV and AIDS diagnoses, including residence at diagnosis, age, race/ethnicity, sex at birth, current gender, country of birth, vital status, HIV exposure category, and CD4 and HIV viral load test results are from the Maryland Department of Health's eHARS, as of June 30, 2019.

Population data by sex, age, and race/ethnicity are from the July 1, 2018 U.S. Census Estimates. Population data by country-of-birth are from the Census Bureau's 2017 American Community Survey. This produces a difference in total population due to the different source. Due to estimation limitations, some population totals may not equal the sum of its components. When needed, age groups were divided by assuming uniform age distribution within the age group. Non-Hispanic multiple race and Non-Hispanic some other race from the Census were combined into one group.

The continuum of care is adapted from a 2011 article in Clinical Infectious Diseases in which a continuum of care "cascade" is used to illustrate estimates of the number of persons living with HIV who belong to each of the stages of engagement in HIV care.

### **Tabulation of Column Totals**

Numbers in figures, tables and generally in the text have been rounded. Discrepancies in tables between totals and sums of components are due to rounding.

### **Data Suppression**

In order to protect the confidentiality of people living with diagnosed HIV, data are suppressed in the following instances:

- Data describing a demographic group or geographic area (e.g. ZIP code) with a population less than 1,000 people.
- All clinical/laboratory information if it is describing less than 5 people.
- If any cell is suppressed, additional cells are also suppressed as necessary to prevent back calculation of the suppressed cell(s).

Exposure/risk data is not suppressed due to statistical adjustment resulting in the reporting of estimated or probable risk.

### **HIV Exposure Categories**

The Centers for Disease Control and Prevention (CDC) developed a hierarchy of exposure categories for surveillance purposes. Persons with more than one reported risk factor are classified in the exposure category listed first in the hierarchy and therefore counted only once. Men who report a history of sexual contact with other men and report injection drug use constitutes a separate transmission category.

<u>MSM/IDU:</u> Men who report a history of sexual contact with other men who also have engaged in injection drug

<u>Male-to-male Sexual Contact (MSM):</u> Men who report a history of sexual contact with other men (homosexual contact) including men who report sexual contact with both men and women (bisexual contact).

**Injection Drug Use (IDU):** Men or women who report receiving an injection, either self-administered or given by another person, of a drug that was not prescribed by a physician.

**Heterosexual Contact (HET):** Men or women who report a history of sexual contact with a person of the opposite sex who is known to be HIV positive or at increased risk for HIV transmission. Risk groups include bisexual men, IDUs and recipients of blood, blood components, transplants of organ or tissue, and artificial insemination.

Perinatal Exposure: Any baby born to a woman living with diagnosed HIV.

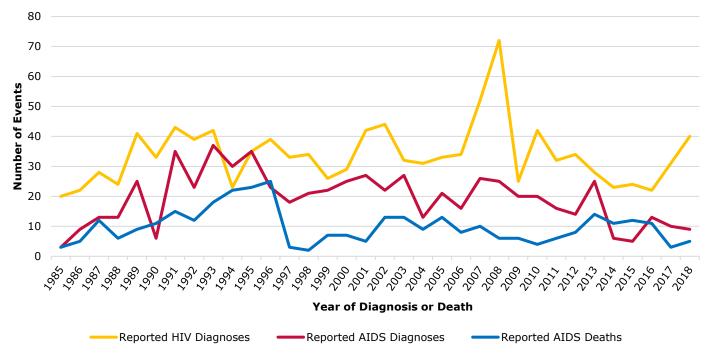
<u>Other Exposure:</u> Includes men or women who received clotting factor for hemophilia/coagulation disorder, or received a transfusion of blood/blood components, or received a transplant of tissue/organs or artificial insemination, or worked in a health care or clinical laboratory setting.

Not all exposure data is reported and is therefore missing in some instances. Multiple imputation is a statistical method by which missing exposure categories are replaced with estimated or probable exposure categories. Multiple imputation involves filling in the missing exposure category with multiple possible exposures, creating several complete datasets. Filling in the missing exposure category is done using the observed data for the individual person as well as data in aggregate from other people living with diagnosed HIV in Maryland. The complete datasets, containing the various predictions for each missing exposure category, are combined to create a final dataset with previously missing exposure category replaced by weighted estimates. Perinatal transmission and other exposure categories are never estimated or adjusted and depict the reported exposure category.

#### Section II - Trends 1985-2018

### Figure 1 – Trends in Reported HIV and AIDS Diagnoses and Deaths, Among Residents at Diagnosis, 1985-2018, Reported through June 30, 2019

People Diagnosed with HIV (Reported HIV Diagnoses) by Year of HIV Diagnosis, People Diagnosed with HIV with an AIDS Diagnosis (Reported AIDS Diagnoses) by Year of AIDS Diagnosis, and People Diagnosed with HIV with an AIDS Diagnosis Reported to have Died of Any Cause (Reported AIDS Deaths) by Year of Death, from 1985 through 2018, as Reported through June 30, 2019

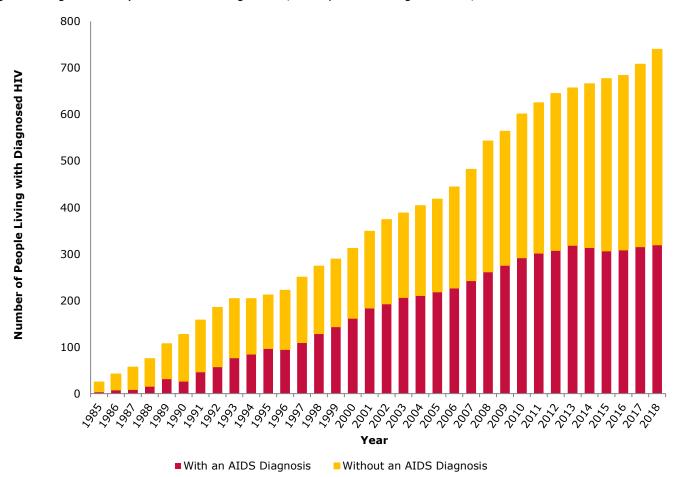


Year of Diagnosis or Death	Reported HIV Diagnoses	Reported AIDS Diagnoses	Reported AIDS Deaths	Year of Diagnosis or Death	Reported HIV Diagnoses	Reported AIDS Diagnoses	Reported AIDS Deaths
<1985	10	6	2	2002	44	22	13
1985	20	3	3	2003	32	27	13
1986	22	9	5	2004	31	13	9
1987	28	13	12	2005	33	21	13
1988	24	13	6	2006	34	16	8
1989	41	25	9	2007	52	26	10
1990	33	6	11	2008	72	25	6
1991	43	35	15	2009	25	20	6
1992	39	23	12	2010	42	20	4
1993	42	37	18	2011	32	16	6
1994	23	30	22	2012	34	14	8
1995	35	35	23	2013	28	25	14
1996	39	23	25	2014	23	6	11
1997	33	18	3	2015	24	5	12
1998	34	21	2	2016	22	13	11
1999	26	22	7	2017*	31	10	3
2000	29	25	7	2018*	40	9	5
2001	42	27	5	Total	1,162	659	339

<sup>\*2017-2018</sup> reported AIDS deaths are preliminary

### <u>Figure 2 – Trends in People Living with Diagnosed HIV, Among Residents at Diagnosis, 1985-2018, Reported through June 30, 2019</u>

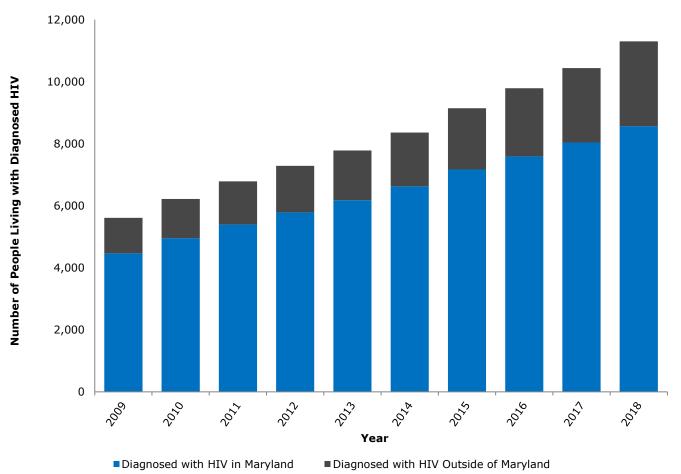
People Living with Diagnosed HIV and Not Reported to have Died as of December 31<sup>st</sup> of Each Year (People Living with Diagnosed HIV without an AIDS Diagnosis, People Living with Diagnosed HIV with an AIDS Diagnosis, and Total People Living with Diagnosed HIV) from 1985 through 2018, as Reported through June 30, 2019



	People Liv	ing with Diagn	osed HIV		People L	People Living with Diagnosed HIV				
Year	Year without an AIDS Diagnosis	with an AIDS Diagnosis	Total	Year	without an AIDS Diagnosis	with an AIDS Diagnosis	Total			
1985	21	4	25	2002	181	193	374			
1986	34	8	42	2003	181	207	388			
1987	48	9	57	2004	193	211	404			
1988	59	16	75	2005	199	219	418			
1989	75	32	107	2006	217	227	444			
1990	100	27	127	2007	239	243	482			
1991	111	47	158	2008	281	262	543			
1992	127	58	185	2009	288	276	564			
1993	127	77	204	2010	309	292	601			
1994	119	85	204	2011	323	302	625			
1995	115	97	212	2012	337	308	645			
1996	127	95	222	2013	338	319	657			
1997	140	110	250	2014	352	314	666			
1998	145	129	274	2015	370	307	677			
1999	145	144	289	2016	375	309	684			
2000	150	162	312	2017	392	316	708			
2001	165	184	349	2018	420	320	740			

### <u>Figure 3 – Trends in People Aged 13+ Living with Diagnosed HIV, Among Current Residents, 2009-2018, Reported through June 30, 2019</u>

People Living with Diagnosed HIV in Western Region and Not Reported to have Died as of December 31st of Each Year from 2009 through 2018, as Reported through June 30, 2019

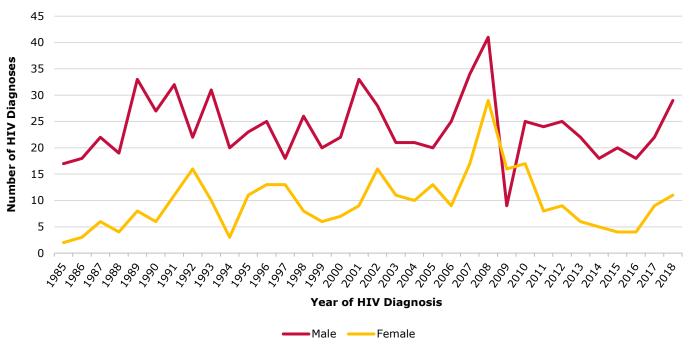


W	Population Age	Western Region Re	Western Region Residents Aged 13+ as of December 31st of the Specified Year							
Year	13+	Diagnosed with HIV in Maryland	Diagnosed with HIV Outside of Maryland	Total	Rate					
2009	403,392	4,463	1,148	5,611	1,391.0					
2010	407,616	4,957	1,262	6,219	1,525.7					
2011	411,741	5,397	1,389	6,786	1,648.1					
2012	414,251	5,784	1,504	7,288	1,759.3					
2013	416,003	6,178	1,607	7,785	1,871.4					
2014	417,595	6,628	1,735	8,363	2,002.7					
2015	419,214	7,171	1,975	9,146	2,181.7					
2016	421,695	7,591	2,197	9,788	2,321.1					
2017	425,143	8,042	2,397	10,439	2,455.4					
2018	429,385	8,565	2,734	11,299	2,631.4					

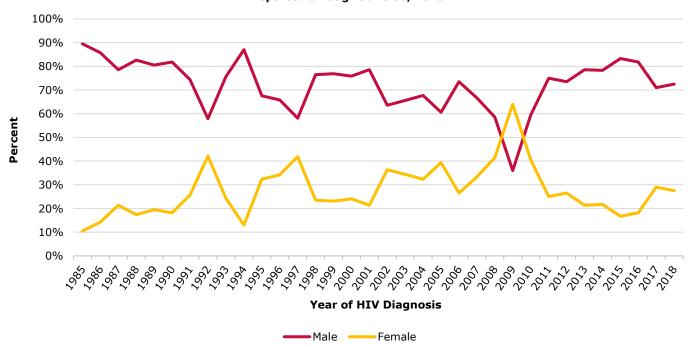
### <u>Figure 4 – Trends in Reported HIV Diagnoses, Among Residents at Diagnosis Aged</u> 13+, by Sex at Birth, 1985-2018, Reported through June 30, 2019

Number and Percent by Sex at Birth of People Diagnosed with HIV, Age 13+ at HIV Diagnosis, by Year of HIV Diagnosis from 1985 through 2018, as Reported through June 30, 2019





#### Reported HIV Diagnoses Among People Aged 13+ by Sex at Birth, 1985-2018, Reported through June 30, 2019



#### Reported HIV Diagnoses Among People Aged 13+ Sex at Birth Year of HIV Diagnosis Number Male **Female** Number Number **Percent Percent** <1985 100.0% 0.0% 89.5% 10.5% 85.7% 14.3% 78.6% 21.4% 82.6% 17.4% 19.5% 80.5% 81.8% 18.2% 74.4% 25.6% 57.9% 42.1% 75.6% 24.4% 13.0% 87.0% 32.4% 67.6% 65.8% 34.2% 58.1% 41.9% 76.5% 23.5% 76.9% 23.1% 75.9% 24.1% 78.6% 21.4% 63.6% 36.4% 65.6% 34.4% 67.7% 32.3% 39.4% 60.6% 73.5% 26.5% 33.3% 66.7% 58.6% 41.4% 36.0% 64.0% 59.5% 40.5% 75.0% 25.0%

73.5%

78.6%

78.3%

83.3%

81.8%

71.0%

72.5%

71.3%

1,150

**Total** 

26.5%

21.4%

21.7%

16.7%

18.2%

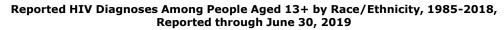
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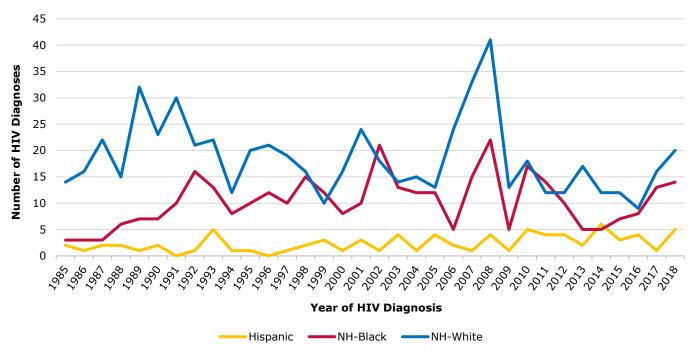
27.5%

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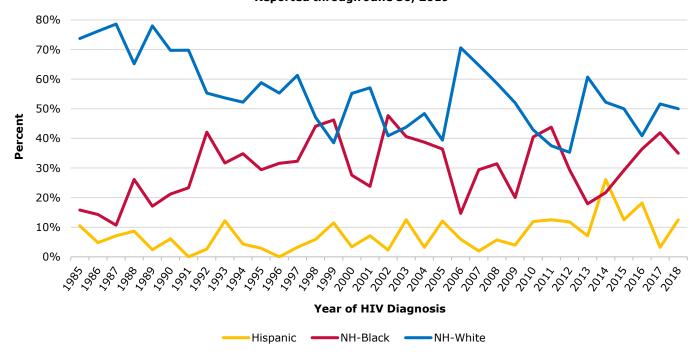
### <u>Figure 5 – Trends in Reported HIV Diagnoses, Among Residents at Diagnosis Aged</u> 13+, by Race/Ethnicity, 1985-2018, Reported through June 30, 2019

Number and Percent by Race/Ethnicity of People Diagnosed with HIV, Age 13+ at HIV Diagnosis, by Year of HIV Diagnosis from 1985 through 2018, as Reported through June 30, 2019





#### Reported HIV Diagnoses Among People Aged 13+ by Race/Ethnicity, 1985-2018, Reported through June 30, 2019



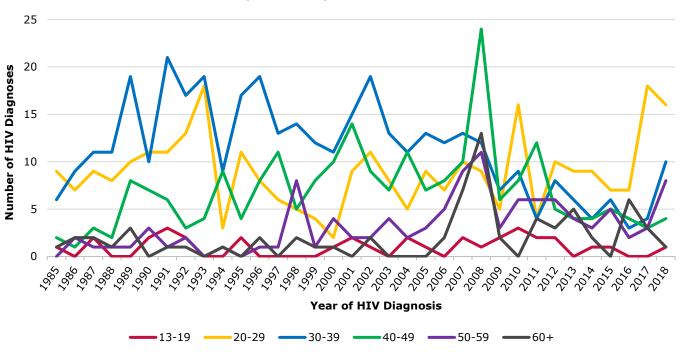
Non-Hispanic Other race not shown

	Reported HIV Diagnoses Among People Aged 13+											
Year of	_				Race/Etl							
HIV Diagnosis	No.	Hispa	nic	Non-His Black,		Non-His White,		Non-Hispar Rac				
		No.	%	No.	%	No.	%	No.	%			
<1985	10	0	0.0%	4	40.0%	5	50.0%	1	10.0%			
1985	19	2	10.5%	3	15.8%	14	73.7%	0	0.0%			
1986	21	1	4.8%	3	14.3%	16	76.2%	1	4.8%			
1987	28	2	7.1%	3	10.7%	22	78.6%	1	3.6%			
1988	23	2	8.7%	6	26.1%	15	65.2%	0	0.0%			
1989	41	1	2.4%	7	17.1%	32	78.0%	1	2.4%			
1990	33	2	6.1%	7	21.2%	23	69.7%	1	3.0%			
1991	43	0	0.0%	10	23.3%	30	69.8%	3	7.0%			
1992	38	1	2.6%	16	42.1%	21	55.3%	0	0.0%			
1993	41	5	12.2%	13	31.7%	22	53.7%	1	2.4%			
1994	23	1	4.3%	8	34.8%	12	52.2%	2	8.7%			
1995	34	1	2.9%	10	29.4%	20	58.8%	3	8.8%			
1996	38	0	0.0%	12	31.6%	21	55.3%	5	13.2%			
1997	31	1	3.2%	10	32.3%	19	61.3%	1	3.2%			
1998	34	2	5.9%	15	44.1%	16	47.1%	1	2.9%			
1999	26	3	11.5%	12	46.2%	10	38.5%	1	3.8%			
2000	29	1	3.4%	8	27.6%	16	55.2%	4	13.8%			
2001	42	3	7.1%	10	23.8%	24	57.1%	5	11.9%			
2002	44	1	2.3%	21	47.7%	18	40.9%	4	9.1%			
2003	32	4	12.5%	13	40.6%	14	43.8%	1	3.1%			
2004	31	1	3.2%	12	38.7%	15	48.4%	3	9.7%			
2005	33	4	12.1%	12	36.4%	13	39.4%	4	12.1%			
2006	34	2	5.9%	5	14.7%	24	70.6%	3	8.8%			
2007	51	1	2.0%	15	29.4%	33	64.7%	2	3.9%			
2008	70	4	5.7%	22	31.4%	41	58.6%	3	4.3%			
2009	25	1	4.0%	5	20.0%	13	52.0%	6	24.0%			
2010	42	5	11.9%	17	40.5%	18	42.9%	2	4.8%			
2011	32	4	12.5%	14	43.8%	12	37.5%	2	6.3%			
2012	34	4	11.8%	10	29.4%	12	35.3%	8	23.5%			
2013	28	2	7.1%	5	17.9%	17	60.7%	4	14.3%			
2014	23	6	26.1%	5	21.7%	12	52.2%	0	0.0%			
2015	24	3	12.5%	7	29.2%	12	50.0%	2	8.3%			
2016	22	4	18.2%	8	36.4%	9	40.9%	1	4.5%			
2017	31	1	3.2%	13	41.9%	16	51.6%	1	3.2%			
2018	40	5	12.5%	14	35.0%	20	50.0%	1	2.5%			
Total	1,150	80	7.0%	355	30.9%	637	55.4%	78	6.8%			

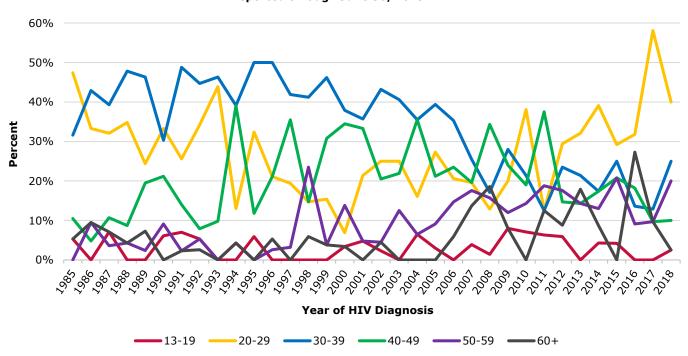
### <u>Figure 6 – Trends in Reported HIV Diagnoses, Among Residents at Diagnosis Aged</u> 13+, 1985-2018, Reported through June 30, 2019

Number and Percent by Age at HIV Diagnosis of People Diagnosed with HIV, Age 13+ at HIV Diagnosis, by Year of HIV Diagnosis from 1985 through 2018, as Reported through June 30, 2019





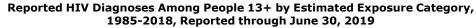
#### Reported HIV Diagnoses Among People Aged 13+ by Age at Diagnosis, 1985-2018, Reported through June 30, 2019

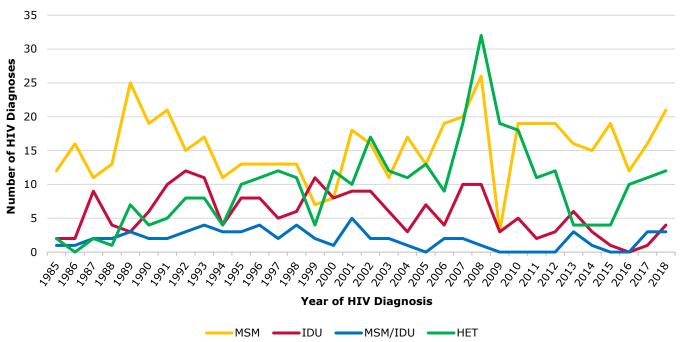


	Reported HIV Diagnoses Among People Aged 13+												
Year of HIV						Ag	e at HIV	Diagnos	sis				
Diagnosis	No.	13-19		20	-29	30	-39	40	-49	50	-59	60+	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
<1985	10	1	10.0%	4	40.0%	4	40.0%	1	10.0%	0	0.0%	0	0.0%
1985	19	1	5.3%	9	47.4%	6	31.6%	2	10.5%	0	0.0%	1	5.3%
1986	21	0	0.0%	7	33.3%	9	42.9%	1	4.8%	2	9.5%	2	9.5%
1987	28	2	7.1%	9	32.1%	11	39.3%	3	10.7%	1	3.6%	2	7.1%
1988	23	0	0.0%	8	34.8%	11	47.8%	2	8.7%	1	4.3%	1	4.3%
1989	41	0	0.0%	10	24.4%	19	46.3%	8	19.5%	1	2.4%	3	7.3%
1990	33	2	6.1%	11	33.3%	10	30.3%	7	21.2%	3	9.1%	0	0.0%
1991	43	3	7.0%	11	25.6%	21	48.8%	6	14.0%	1	2.3%	1	2.3%
1992	38	2	5.3%	13	34.2%	17	44.7%	3	7.9%	2	5.3%	1	2.6%
1993	41	0	0.0%	18	43.9%	19	46.3%	4	9.8%	0	0.0%	0	0.0%
1994	23	0	0.0%	3	13.0%	9	39.1%	9	39.1%	1	4.3%	1	4.3%
1995	34	2	5.9%	11	32.4%	17	50.0%	4	11.8%	0	0.0%	0	0.0%
1996	38	0	0.0%	8	21.1%	19	50.0%	8	21.1%	1	2.6%	2	5.3%
1997	31	0	0.0%	6	19.4%	13	41.9%	11	35.5%	1	3.2%	0	0.0%
1998	34	0	0.0%	5	14.7%	14	41.2%	5	14.7%	8	23.5%	2	5.9%
1999	26	0	0.0%	4	15.4%	12	46.2%	8	30.8%	1	3.8%	1	3.8%
2000	29	1	3.4%	2	6.9%	11	37.9%	10	34.5%	4	13.8%	1	3.4%
2001	42	2	4.8%	9	21.4%	15	35.7%	14	33.3%	2	4.8%	0	0.0%
2002	44	1	2.3%	11	25.0%	19	43.2%	9	20.5%	2	4.5%	2	4.5%
2003	32	0	0.0%	8	25.0%	13	40.6%	7	21.9%	4	12.5%	0	0.0%
2004	31	2	6.5%	5	16.1%	11	35.5%	11	35.5%	2	6.5%	0	0.0%
2005	33	1	3.0%	9	27.3%	13	39.4%	7	21.2%	3	9.1%	0	0.0%
2006	34	0	0.0%	7	20.6%	12	35.3%	8	23.5%	5	14.7%	2	5.9%
2007	51	2	3.9%	10	19.6%	13	25.5%	10	19.6%	9	17.6%	7	13.7%
2008	70	1	1.4%	9	12.9%	12	17.1%	24	34.3%	11	15.7%	13	18.6%
2009	25	2	8.0%	5	20.0%	7	28.0%	6	24.0%	3	12.0%	2	8.0%
2010	42	3	7.1%	16	38.1%	9	21.4%	8	19.0%	6	14.3%	0	0.0%
2011	32	2	6.3%	4	12.5%	4	12.5%	12	37.5%	6	18.8%	4	12.5%
2012	34	2	5.9%	10	29.4%	8	23.5%	5	14.7%	6	17.6%	3	8.8%
2013	28	0	0.0%	9	32.1%	6	21.4%	4	14.3%	4	14.3%	5	17.9%
2014	23	1	4.3%	9	39.1%	4	17.4%	4	17.4%	3	13.0%	2	8.7%
2015	24	1	4.2%	7	29.2%	6	25.0%	5	20.8%	5	20.8%	0	0.0%
2016	22	0	0.0%	7	31.8%	3	13.6%	4	18.2%	2	9.1%	6	27.3%
2017	31	0	0.0%	18	58.1%	4	12.9%	3	9.7%	3	9.7%	3	9.7%
2018	40	1	2.5%	16	40.0%	10	25.0%	4	10.0%	8	20.0%	1	2.5%
Total	1,150	35	3.0%	308	26.8%	391	34.0%	237	20.6%	111	9.7%	68	5.9%
i Ulai	1,130	رد	3.070	300	20.070	221	34.070	237	20.070	111	5.7 70	00	٦.۶

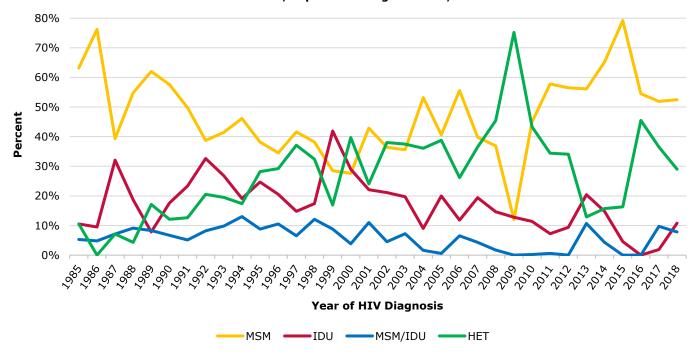
## <u>Figure 7 – Trends in Reported HIV Diagnoses, Among Residents at Diagnosis Aged</u> 13+, by Estimated Exposure Category, 1985-2018, Reported through June 30, 2019

Number and Percent by Estimated Exposure Category§ of People Diagnosed with HIV, Age 13+ at HIV Diagnosis, by Year of HIV Diagnosis from 1985 through 2018, as Reported through June 30, 2019





#### Reported HIV Diagnoses Among People Aged 13+ by Estimated Exposure Category, 1985-2018, Reported through June 30, 2019



Other exposure category not shown

§ Multiple imputation was used to estimate and adjust for missing exposure category.

Reported HIV Diagnoses Among People Aged 13+ Estimated Exposure Category§ Year of % with HIV No Other No. **MSM** IDU MSM/IDU HET **Diagnosis** Reported **Exposure** Exposure<sup>¥</sup> % % % % No. % No. No. No. No. <1985 10 10.0% 7 70.0% 1 13.0% 1 10.0% 1 7.0% 0 0.0% 2 1985 19 0.0% 12 63.2% 10.5% 1 5.3% 10.5% 10.5% 1986 21 0.0% 16 76.2% 2 9.5% 4.8% 0 0.0% 2 9.5% 1 1987 0.0% 39.3% 32.1% 7.1% 7.1% 14.3% 28 11 9 2 2 4 1988 23 4.3% 13 54.8% 4 18.7% 2 9.1% 1 4.3% 3 13.0% 1989 41 9.8% 25 62.0% 3 7.8% 3 8.3% 7 17.1% 2 4.9% 6.7% 19 2 4 2 1990 33 6.1% 57.6% 6 17.6% 12.1% 6.1% 1991 43 4.7% 21 49.8% 10 23.3% 2 5.1% 5 12.6% 4 9.3% 3 0 38 7.9% 15 38.7% 12 8.2% 8 20.5% 0.0% 1992 32.6% 41.5% 4 9.8% 19.5% 1993 41 0.0% 17 11 26.8% 8 1 2.4% 23 4.3% 4 3 13.0% 4 1 1994 11 46.1% 19.1% 17.4% 4.3% 3 1995 34 2.9% 13 38.2% 8 24.7% 8.8% 10 28.2% 0 0.0% 1996 38 7.9% 13 34.5% 8 20.5% 4 10.5% 11 29.2% 2 5.3% 31 6.5% 13 41.6% 5 14.8% 2 6.5% 37.1% 0.0% 1997 12 0 1998 34 5.9% 13 38.2% 6 17.4% 4 12.1% 11 32.4% 0 0.0% 1999 26 15.4% 7 28.5% 41.9% 2 8.8% 4 16.9% 1 3.8% 11 2000 29 10.3% 8 27.6% 8 29.0% 1 3.8% 12 39.7% n 0.0% 2001 42 14.3% 18 42.9% 9 22.1% 5 11.0% 0 0.0% 10 24.0% 44 2 2002 13.6% 16 36.4% 9 21.1% 4.5% 17 38.0% 0 0.0% 2003 32 6.3% 35.6% 6 19.7% 2 7.2% 12 37.5% 0 0.0% 11 53.2% 3 9.0% 1.6% 0.0% 2004 31 16.1% 17 1 11 36.1% 0 7 2005 33 27.3% 13 40.6% 20.0% 0 0.6% 13 38.8% 0 0.0% 2006 34 17.6% 19 55.6% 4 11.8% 2 6.5% 9 26.2% 0 0.0% 2007 51 45.1% 20 39.8% 10 19.4% 2 4.3% 19 36.5% 0 0.0% 2008 70 51.4% 26 36.9% 10 14.6% 1 1.7% 32 45.4% 1 1.4% 2009 25 48.0% 3 12.0% 3 12.8% 0 0.0% 19 75.2% 0 0.0% 2010 42 38.1% 19 45.0% 5 11.4% 0 0.2% 18 43.3% 0 0.0% 7.2% 32 31.3% 19 57.8% 2 0.6% 34.4% 0.0% 2011 n 11 n 3 0 0 2012 34 11.8% 19 56.5% 9.4% 0.0% 12 0.0% 34.1% 2013 28 17.9% 16 56.1% 6 20.4% 3 10.7% 4 12.9% 0 0.0% 23 8.7% 15 65.2% 3 1 15.7% 0 2014 14.8% 4.3% 4 0.0% 2015 24 8.3% 19 79.2% 1 4.6% 0 0.0% 4 16.3% 0 0.0% 2016 22 0.0% 12 54.5% 0 0.0% 0 0.0% 10 45.5% 0 0.0% 2017 31 6.5% 16 51.9% 1 1.9% 3 9.7% 11 36.5% 0 0.0% 2018 40 17.5% 21 52.5% 4 10.8% 3 7.8% 12 29.0% 0 0.0% 5.7% **Total** 1,150 15.8% 533 46.3% 196 17.0% 65 330 28.7% 25 2.2%

*Note.* Discrepancies in the table between total HIV diagnoses and the sums by exposure category are due to less than 1 percent of people missing transmission category after multiple imputation.

<sup>§</sup> Multiple imputation was used to estimate and adjust for missing transmission category.

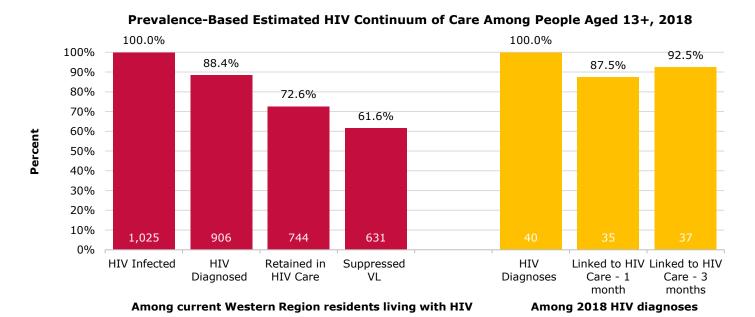
<sup>\*</sup>Percent with no reported exposure prior to multiple imputation adjustment.

### Section III - Continuum of Care Cascades

In their 2011 article in Clinical Infectious Diseases, Gardner et al.<sup>1</sup> utilize a continuum of care "cascade" to illustrate estimates of the number of persons living with HIV who belong to each of the stages of engagement in HIV care.

### <u>Figure 8 – Prevalence-Based Estimated 2018 HIV Continuum of Care Cascades,</u> <u>Among Current Western Region Residents Aged 13+, Reported through June 30,</u> 2019

The prevalence-based Western Region Engagement in HIV Care Cascades (below) apply the Centers for Disease Control and Prevention (CDC) CD4 depletion model to Maryland surveillance data, reported through June 30, 2019, to estimate the number of people living with undiagnosed HIV (11.6 percent) and the estimated number of people living with HIV currently residing in the Western Region. Maryland surveillance data is then used to describe the number and percentage of persons living with HIV in the Western Region on December 31, 2018 and the number and percentage of new HIV diagnoses in 2018 who belong to each of the stages of engagement in HIV care.



Continuum of Care Stage	People Ageo with	l 13+ Living HIV	Continuum of Care Stage	Reported 2018 HIV Diagnoses		
	Number	Percent		Number	Percent	
HIV Infected	1,025	100.0%	New HIV Diagnoses	40	100.0%	
HIV Diagnosed	906	88.4%	Linked to HIV Care – 1 Month	35	87.5%	
Retained in HIV Care	744	72.6%	Linked to HIV Care – 3 Months	37	92.5%	
Suppressed VL	631	61.6%				

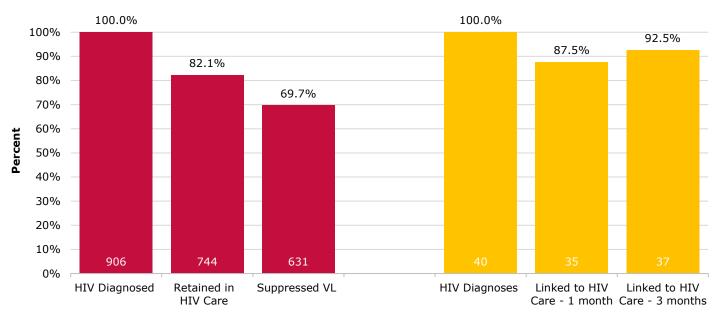
<sup>&</sup>lt;sup>1</sup> Gardner et al, "The Spectrum of Engagement in HIV Care and its Relevance to Test-and-Treat Strategies for Prevention of HIV Infection." Clin Infect Dis. 2011; 52 (6): 793-800.

<sup>&</sup>lt;sup>2</sup> Centers for Disease Control and Prevention. Estimated HIV incidence and prevalence in the United States, 2010–2015. HIV Surveillance Supplemental Report 2018;23(No. 1). http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html. Published March 2018.

### <u>Figure 9 – Diagnosis-Based Estimated 2018 HIV Continuum of Care Cascades, Among Current Western Region Residents Aged 13+, Reported through June 30, 2019</u>

The diagnosis-based Western Region Engagement in HIV Care Cascade (below) uses Maryland surveillance data for current Western Region residents to describe the number and percentage of persons living with diagnosed HIV in the Western Region on December 31, 2018 and the number and percentage of new HIV diagnoses in 2018 who belong to each of the stages of engagement in HIV care.

### Diagnosis-Based Estimated HIV Continuum of Care Among People Aged 13+, 2018



Among current Western Region residents diagnosed with HIV Among 2018 HIV Diagnoses

Continuum of Care Stage	People Aged with	l 13+ Living HIV	Continuum of Care Stage	Reported 2018 HIV Diagnoses		
	Number	Percent	_	Number	Percent	
HIV Diagnosed	906	100.0%	New HIV Diagnoses	40	100.0%	
Retained in HIV Care	744	82.1%	Linked to HIV Care – 1 Month	35	87.5%	
Suppressed VL	631	69.7%	Linked to HIV Care – 3 Months	37	92.5%	

### Section IV –Reported HIV Diagnoses, Among People Aged 13+, by Jurisdiction

<u>Table 1 – Reported HIV Diagnoses, Among People Aged 13+ During 2018, Linked to Care, Late Diagnosis, and First CD4 Test Result by Jurisdiction of Residence at HIV Diagnosis, Reported through June 30, 2019</u>

		Reported HIV Diagnoses Among People Aged 13+									
Jurisdiction of Residence at HIV Diagnosis	Population Age 13+	% of		to Care	Care Late HIV Diagnoses		First CD4 Test Result				
		No. T	Total	Rate -	% 1 mo.	% 3 mo.	%	% with Test	Median Count		
Allegany	62,278	8	20.0%	12.8	***	***	***	***	***		
Frederick	214,057	22	55.0%	10.3	95.5%	95.5%	***	95.5%	471		
Garrett	25,427	1	2.5%	3.9	***	***	***	***	***		
Washington	127,623	9	22.5%	7.1	66.7%	77.8%	***	66.7%	355		
Total	429,385	40	100.0%	9.3	87.5%	92.5%	15.0%	90.0%	436		

<sup>\*\*\*</sup> Data withheld due to low population counts and/or small numbers

<u>Table 2 – Reported AIDS Diagnoses, Among People Aged 13+ During 2018, Mean Years from HIV Diagnosis and Percent Late HIV Diagnosis, by Jurisdiction of Residence at AIDS Diagnosis, Reported through June 30, 2019</u>

		Reported AIDS Diagnoses Among People Aged 13+								
Jurisdiction of Residence at AIDS Diagnosis	Population Age 13+	No.		% of Total	Rate	Mean Years from HIV Diagnosis	% Late HIV Diagnosis			
Allegany	62,278		2	22.2%	3.2	***	***			
Frederick	214,057	:	3	33.3%	1.4	***	***			
Garrett	25,427	(	0	0.0%	0.0					
Washington	127,623	4	4	44.4%	3.1	***	***			
Total	429,385	(	9	100.0%	2.2	3.8	66.7%			

<sup>\*\*\*</sup> Data withheld due to low population counts and/or small numbers

<u>Table 3 – People Aged 13+ Living with Diagnosed HIV, Alive on December 31, 2018, by Jurisdiction of Residence at Diagnosis and Current Residence, Reported through</u>
June 30, 2019

		Total People Aged 13+ Living with Diagnosed HIV									
Jurisdiction of	Population	Residence at Diagnosis					Current	Residence	•	- %	
Residence	Age 13+ -	No.	% of Total	Rate	Ratio (1 in X)	No.	% of Total	Rate	Ratio (1 in X)	Change	
Allegany	62,278	75	10.1%	120.4	830	98	10.8%	157.4	635	30.7%	
Frederick	214,057	360	48.6%	168.2	595	441	48.7%	206.0	485	22.5%	
Garrett	25,427	11	1.5%	43.3	2,312	18	2.0%	70.8	1,413	63.6%	
Washington	127,623	294	39.7%	230.4	434	349	38.5%	273.5	366	18.7%	
Total	429,385	740	100.0%	172.3	580	906	100.0%	211.0	474	22.4%	

<u>Table 4 – CD4 Test Results During 2018 for People Aged 13+ Living with Diagnosed HIV, Alive on December 31, 2018, by Jurisdiction of Current Residence, Reported through June 30, 2019</u>

	Total People Aged 13+ Living with Diagnosed HIV										
Jurisdiction of Current											
Residence	No.	No. with Test	% with Test	Median Count	<200	200-349	350-499	500+			
Allegany	98	88	89.8%	703	3.4%	8.0%	15.9%	72.7%			
Frederick	441	348	78.9%	635	4.9%	8.6%	15.5%	71.0%			
Garrett	18	16	88.9%	837	0.0%	6.3%	25.0%	68.8%			
Washington	349	276	79.1%	624	6.9%	11.6%	14.1%	67.4%			
Total	906	728	80.4%	647	5.4%	9.6%	15.2%	69.8%			

<u>Table 5 – Viral Load Test Results During 2018 for People Aged 13+ Living with Diagnosed HIV, Alive on December 31, 2018, by Jurisdiction of Current Residence, Reported through June 30, 2019</u>

	Total People Aged 13+ Living with Diagnosed HIV									
Jurisdiction of Current			Recent Viral Lo	ad Test Result						
Residence	No.	No. with Test	% with Test	% Suppressed	Median Unsuppressed					
Allegany	98	86	87.8%	94.2%	11,246					
Frederick	441	349	79.1%	90.8%	10,235					
Garrett	18	17	94.4%	82.4%	20,500					
Washington	349	266	76.2%	82.3%	2,980					
Total	906	718	79.2%	87.9%	6,040					

### Section V - People Living with Diagnosed HIV by Age

<u>Table 6 – Reported HIV Diagnoses During 2018, Linked to Care, Late Diagnosis, and First CD4 Test Result by Age at HIV Diagnosis, Reported through June 30, 2019</u>

			Reported HIV Diagnoses									
Age at HIV Diagnosis	Population	N.a.	% of	Rate -	Linked	to Care	Late HIV Diagnoses	First CD4 Resu				
Diagnosis		No.	Total		% 1 mo.	% 3 mo.	%	% with Test	Median Count			
<5 (Pediatric)	28,326	0	0.0%	0.0								
5-12 (Pediatric)	49,001	0	0.0%	0.0								
13-19	45,638	1	2.5%	2.2	***	***	***	***	***			
20-29	64,196	16	40.0%	24.9	93.8%	100.0%	***	93.8%	408			
30-39	64,938	10	25.0%	15.4	80.0%	90.0%	***	80.0%	456			
40-49	65,324	4	10.0%	6.1	***	***	***	***	***			
50-59	73,180	8	20.0%	10.9	87.5%	87.5%	***	100.0%	374			
60+	116,109	1	2.5%	0.9	***	***	***	***	***			
Total	506,712	40	100.0%	7.9	87.5%	92.5%	15.0%	90.0%	436			

<sup>\*\*\*</sup> Data withheld due to low population counts and/or small numbers

<u>Table 7 – People Living with Diagnosed HIV, Alive on December 31, 2018, by Age on December 31, 2018, Reported through June 30, 2019</u>

•	•	_	•							
Age on		-	Total People Living with Diagnosed HIV							
December 31, 2018	Population	No.	% of Total	Rate	Ratio (1 in X)					
<5 (Pediatric)	28,326	0	0.0%	0.0						
5-12 (Pediatric)	49,001	4	0.4%	8.2	12,250					
13-19	45,638	5	0.5%	11.0	9,128					
20-29	64,196	91	10.0%	141.8	705					
30-39	64,938	134	14.7%	206.4	485					
40-49	65,324	220	24.2%	336.8	297					
50-59	73,180	292	32.1%	399.0	251					
60+	116,109	164	18.0%	141.2	708					
Total	506,712	910	100.0%	179.6	557					

<u>Table 8 – CD4 Test Results During 2018 for People Aged 13+ Living with Diagnosed HIV, Alive on December 31, 2018, by Age on December 31, 2018, Reported through June 30, 2019</u>

•	Total People Aged 13+ Living with Diagnosed HIV											
Age on - December 31,												
2018	No.	No. with Test	% with Test	Median Count	<200	200-349	350-499	500+				
13-19	5	***	***	***	***	***	***	***				
20-29	91	***	***	***	***	***	***	***				
30-39	134	106	79.1%	660	7.5%	6.6%	15.1%	70.8%				
40-49	220	179	81.4%	648	7.8%	8.4%	15.1%	68.7%				
50-59	292	231	79.1%	654	4.3%	9.5%	16.9%	69.3%				
60+	164	133	81.1%	585	1.5%	16.5%	15.0%	66.9%				
Total	906	728	80.4%	647	5.4%	9.6%	15.2%	69.8%				

<sup>\*\*\*</sup> Data withheld due to low population counts and/or small numbers

Table 9 – Viral Load Test Results During 2018 for People Living with Diagnosed HIV, Alive on December 31, 2018, by Age on December 31, 2018, Reported through June 30, 2019

•	Total People Aged 13+ Living with Diagnosed HIV									
Age on December 31, 2018			Recent Viral Load Test Result							
	No.	No. with Test	% with Test	% Suppressed	Median Unsuppressed					
13-19	5	***	***	***	***					
20-29	91	***	***	***	***					
30-39	134	106	79.1%	83.0%	9,343					
40-49	220	173	78.6%	82.7%	19,600					
50-59	292	227	77.7%	91.2%	2,300					
60+	164	133	81.1%	93.2%	742					
Total	906	718	79.2%	87.9%	6,040					

<sup>\*\*\*</sup> Data withheld due to low population counts and/or small numbers

### Section VI - People Aged 13+ Living with Diagnosed HIV by Demographics

<u>Table 10 – Reported HIV Diagnoses, Among People Aged 13+ During 2018, Linked to Care, Late Diagnosis, and First CD4 Test Result by Sex at Birth, Gender, Race/Ethnicity, and Country of Birth, Reported through June 30, 2019</u>

			Re	ported HI	V Diagnos	ses Among	g People Age	113+	
Demographic Characteristics	Population Age 13+	No.	% of	Rate	Linked	to Care	Late HIV Diagnoses		D4 Test sult
	<b>J</b> -	140.	Total	Rate .	% 1 mo.	% 3 mo.	%	% with Test	Median Count
Sex at Birth									
Male	214,786	29	72.5%	13.5	93.1%	96.6%	20.7%	93.1%	430
Female	214,598	11	27.5%	5.1	72.7%	81.8%	0.0%	81.8%	479
Gender									
Male	214,786	28	70.0%	13.0	92.9%	96.4%	21.4%	92.9%	419
Female	214,598	11	27.5%	5.1	***	***	***	***	***
Transgender Female		1	2.5%		***	***	***	***	***
Transgender Male		0	0.0%						
Another Gender Identity		0	0.0%						
Race/Ethnicity									
Hispanic	26,580	5	12.5%	18.8	***	***	***	***	***
Non-Hispanic	402,805	35	87.5%	8.7	88.6%	91.4%	17.1%	91.4%	419
American Indian/Alaska Native, only	860	0	0.0%	0.0					
Asian, only	12,998	0	0.0%	0.0					
Black, only	40,255	14	35.0%	34.8	85.7%	85.7%	***	92.9%	454
Native Hawaiian/Other Pacific Islander, only	222	0	0.0%	0.0					
White, only	340,891	20	50.0%	5.9	90.0%	90.0%	***	90.0%	400
Multiracial/Other	7,579	1	2.5%	13.2	***	***	***	***	***
Total	429,385	40	100.0%	9.3	87.5%	92.5%	15.0%	90.0%	436
Country of Birth									
United States	386,277	31	77.5%	8.0	87.1%	90.3%	16.1%	90.3%	400
Foreign-Born	32,980	7	17.5%	21.2	85.7%	100.0%	0.0%	85.7%	714
Africa		2	5.0%		***	***	***	***	***
Asia		0	0.0%						
Caribbean		1	2.5%		***	***	***	***	***
Central America		1	2.5%		***	***	***	***	***
Other		3	7.5%		***	***	***	***	***
Unknown		2	5.0%		***	***	***	***	***
Total	419,257	40	100.0%	9.5	87.5%	92.5%	15.0%	90.0%	436
	- / -								

*Note*. Population data by sex at birth, age, and race/ethnicity are from the 2018 U.S. Census population estimates. Population data by gender are unavailable. Population data by country of birth are from the 2017 American Community Survey.

<sup>\*\*\*</sup> Data withheld due to low population counts and/or small numbers

<u>Table 11 – People Aged 13+ Living with Diagnosed HIV Alive on December 31, 2018, by Sex at Birth, Gender, Race/Ethnicity, and Country of Birth, Reported through June 30, 2019</u>

	Population —	Total Peop	le Aged 13+ Liv	ing with Diagn	osed HIV
Demographic Characteristics	Age 13+	No.	% of Total	Rate	Ratio (1 in X)
Sex at Birth					
Male	214,786	636	70.2%	296.1	33
Female	214,598	270	29.8%	125.8	79
Gender					
Male	214,786	630	69.5%	293.3	34
Female	214,598	269	29.7%	125.4	79
Transgender Female		6	0.7%		
Transgender Male		1	0.1%		-
Another Gender Identity		0	0.0%		-
Race/Ethnicity					
Hispanic	26,580	85	9.4%	319.8	31
Non-Hispanic	402,805	821	90.6%	203.8	49
American Indian/Alaska Native, only	860	0	0.0%	0.0	
Asian, only	12,998	8	0.9%	61.5	1,62
Black, only	40,255	313	34.5%	777.5	12
Native Hawaiian/Other Pacific Islander, only	222	0	0.0%	0.0	
White, only	340,891	417	46.0%	122.3	81
Multiracial/Other	7,579	83	9.2%	1,095.2	ç
Total	429,385	906	100.0%	211.0	47
Country of Birth					
United States	386,277	764	84.3%	197.8	50
Foreign-Born	32,980	102	11.3%	309.3	32
Africa		58	6.4%		
Asia		7	0.8%		
Caribbean		4	0.4%		
Central America		19	2.1%		
Other		14	1.5%		
Unknown		40	4.4%		
Total	419,257	906	100.0%	216.1	46

*Note*. Population data by sex at birth, age, and race/ethnicity are from the 2018 U.S. Census population estimates. Population data by gender are unavailable. Population data by country of birth are from the 2017 American Community Survey.

<u>Table 12 – CD4 Test Results During 2018 for People Aged 13+ Living with Diagnosed HIV, Alive on December 31, 2018, by Sex at Birth, Gender, Race/Ethnicity and Country of Birth, Reported through June 30, 2019</u>

		T	otal People A	\ged 13+ L	iving with D	iagnosed H	lIV	
	_			Recent	CD4 Test R	esult		
Demographic Characteristics	No.	No. with Test	% with Test	Median Count	<200	200- 349	350- 499	500+
Sex at Birth								
Male	636	509	80.0%	642	4.3%	11.4%	15.5%	68.8%
Female	270	219	81.1%	652	7.8%	5.5%	14.6%	72.1%
Gender								
Male	630	503	79.8%	640	4.2%	11.5%	15.7%	68.6%
Female	269	218	81.0%	649	7.8%	5.5%	14.7%	72.0%
Transgender Female	6	***	***	***	***	***	***	***
Transgender Male	1	***	***	***	***	***	***	***
Another Gender Identity	0							
Race/Ethnicity								
Hispanic	85	64	75.3%	631	6.3%	9.4%	15.6%	68.8%
Non-Hispanic	821	664	80.9%	650	5.3%	9.6%	15.2%	69.9%
American Indian/Alaska Native, only	0							
Asian, only	8	***	***	***	***	***	***	***
Black, only	313	252	80.5%	575	6.0%	8.7%	20.6%	64.7%
Native Hawaiian/Other Pacific Islander, only	0							
White, only	417	331	79.4%	701	5.1%	9.7%	10.6%	74.6%
Multiracial/Other	83	***	***	***	***	***	***	***
Country of Birth								
United States	764	627	82.1%	645	5.6%	10.0%	15.2%	69.2%
Foreign-Born	102	78	76.5%	575	3.8%	7.7%	19.2%	69.2%
Africa	58	49	84.5%	524	4.1%	10.2%	18.4%	67.3%
Asia	7	***	***	***	***	***	***	***
Caribbean	4	***	***	***	***	***	***	***
Central America	19	13	68.4%	711	0.0%	0.0%	15.4%	84.6%
Other	14	11	78.6%	652	9.1%	9.1%	18.2%	63.6%
Unknown	40	23	57.5%	800	4.3%	4.3%	4.3%	87.0%
Total	906	728	80.4%	647	5.4%	9.6%	15.2%	69.8%

<sup>\*\*\*</sup> Data withheld due to low population counts and/or small numbers

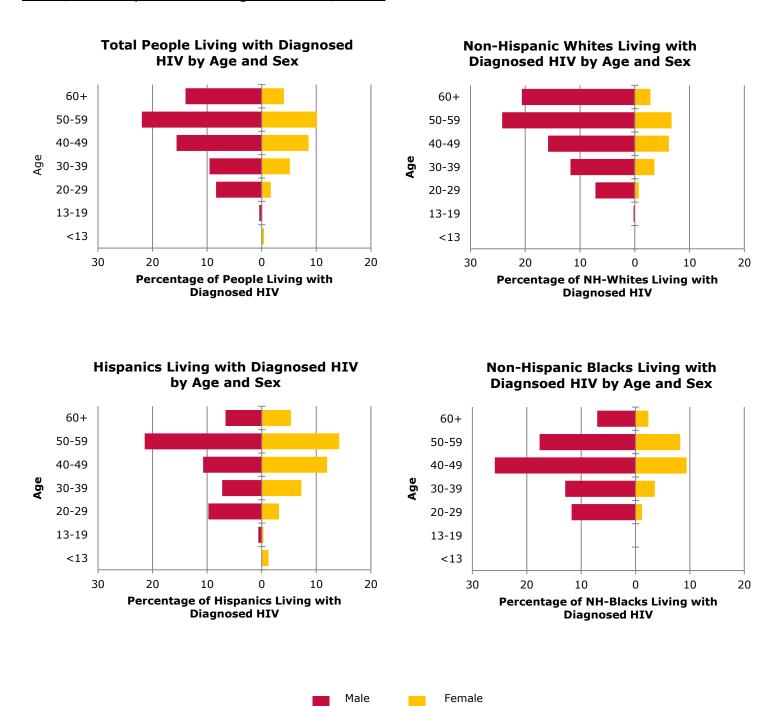
<u>Table 13 – Viral Load Test Results During 2018 for People Aged 13+ Living with Diagnosed HIV, Alive on December 31, 2018, by Sex at Birth, Gender, Race/Ethnicity and Country of Birth, Reported through June 30, 2019</u>

		Total People Age	d 13+ Living wit	h Diagnosed HIV		
Demographic Characteristics			Recent Viral L	oad Test Result		
	No.	No. with Test	% with Test	% Suppressed	Median Unsuppressed	
Sex at Birth						
Male	636	501	78.8%	91.6%	19,600	
Female	270	217	80.4%	79.3%	2,890	
Gender						
Male	630	495	78.6%	91.5%	19,60	
Female	269	216	80.3%	79.2%	2,89	
Transgender Female	6	***	***	***	**	
Transgender Male	1	***	***	***	**	
Another Gender Identity	0				-	
Race/Ethnicity						
Hispanic	85	65	76.5%	89.2%	3,83	
Non-Hispanic	821	653	79.5%	87.7%	7,00	
American Indian/Alaska Native, only	0				-	
Asian, only	8	***	***	***	**	
Black, only	313	252	80.5%	85.3%	6,56	
Native Hawaiian/Other Pacific Islander, only	0					
White, only	417	320	76.7%	91.6%	3,32	
Multiracial/Other	83	***	***	***	**	
Country of Birth						
United States	764	616	80.6%	87.3%	7,00	
Foreign-Born	102	79	77.5%	89.9%	3,36	
Africa	58	50	86.2%	90.0%	2,04	
Asia	7	***	***	***	**	
Caribbean	4	***	***	***	**	
Central America	19	13	68.4%	100.0%		
Other	14	11	78.6%	81.8%	8,16	
Unknown	40	23	57.5%	95.7%	34	
Total	906	718	79.2%	87.9%	6,04	

<sup>\*\*\*</sup> Data withheld due to low population counts and/or small numbers

### Section VII - People Living with Diagnosed HIV by Expanded Demographics

<u>Figure 10 – Population Pyramids of Total People Living with Diagnosed HIV, by Age on December 31, 2018, Sex at Birth, and Race/Ethnicity, Alive on December 31, 2018, and Reported through June 30, 2019</u>



<u>Table 14 – Total Males Living with Diagnosed HIV by Age on December 31, 2018 and Race/Ethnicity, Alive on December 31, 2018, and Reported through June 30, 2019</u>

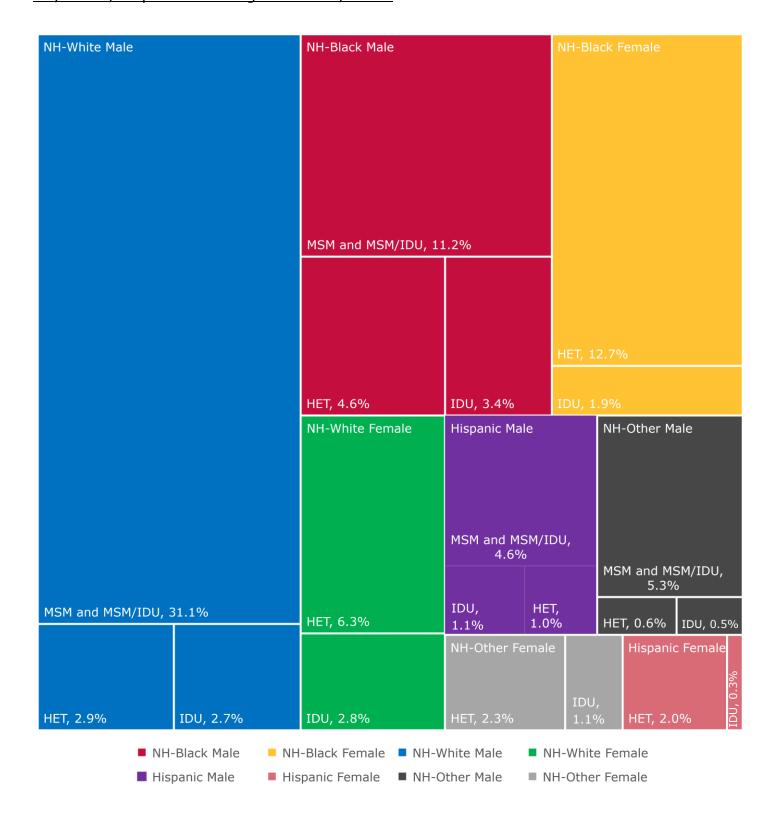
	Total Males Living with Diagnosed HIV										
Age on			Race/E	thnicity		Total Males					
December 31, 2018		Hispanic	Non-Hispanic Black, only	Non-Hispanic White, only	Non-Hispanic Other Race	by Age Group					
	Population	4,674	3,950	26,999	3,938	39,560					
<12 (Dodintria)	Number	0	0	0	0	0					
<13 (Pediatric)	Rate	0.0	0.0	0.0	0.0	0.0					
	Ratio (1 in X)										
	Population	2,211	2,779	16,456	2,119	23,566					
13-19	Number	0	2	1	1	4					
13-19	Rate	0.0	72.0	6.1	47.2	17.0					
	Ratio (1 in X)		1,390	16,456	2,119	5,892					
	Population	2,753	5,722	23,838	1,950	34,263					
20.20	Number	10	31	30	5	76					
20-29	Rate	363.2	541.8	125.8	256.4	221.8					
	Ratio (1 in X)	275	185	795	390	451					
	Population	3,477	5,147	23,590	1,669	33,883					
20.20	Number	11	23	49	4	87					
30-39	Rate	316.4	446.9	207.7	239.7	256.8					
	Ratio (1 in X)	316	224	481	417	389					
	Population	2.762	4,610	24,298	1,802	33,472					
40.40	Number	22	34	66	20	142					
40-49	Rate	796.5	737.5	271.6	1,109.9	424.2					
	Ratio (1 in X)	126	136	368	90	236					
	Population	1,571	3,412	30,270	1,275	36,528					
F0 F0	Number	15	68	101	16	200					
50-59	Rate	954.8	1,993.0	333.7	1,254.9	547.5					
	Ratio (1 in X)	105	50	300	80	183					
	Population	1,074	2,411	48,087	1,502	53,074					
60.	Number	6	21	86	14	127					
60+	Rate	558.7	871.0	178.8	932.1	239.3					
	Ratio (1 in X)	179	115	559	107	418					
	Population	18,522	28,031	193,538	14,255	254,346					
Total Males by	Number	64	179	333	60	636					
Race/Ethnicity	Rate	345.5	638.6	172.1	420.9	250.1					
	Ratio (1 in X)	289	157	581	238	400					

<u>Table 15 – Total Females Living with Diagnosed HIV by Age on December 31, 2018 and Race/Ethnicity, Alive on December 31, 2018, and Reported through June 30, 2019</u>

Total Females Living with Diagnosed HIV  Age on Race/Ethnicity								
Age on				Total Females				
December 31, 2018		Hispanic	Non-Hispanic Black, only	Non-Hispanic White, only	Non-Hispanic Other Race	by Age Group		
	Population	4,554	3,891	25,583	3,740	37,768		
<13 (Pediatric)	Number	0	4	0	0	4		
<13 (Pediatric)	Rate	0.0	102.8	0.0	0.0	10.		
	Ratio (1 in X)		973			9,44		
	Population	2,195	2,458	15,396	2,022	22,07		
13-19	Number	0	1	0	0			
13-19	Rate	0.0	40.7	0.0	0.0	4.		
	Ratio (1 in X)		2,458			22,07		
	Population	2,366	3,001	22,526	2,040	29,93		
20.20	Number	1	10	3	1	1		
20-29	Rate	42.3	333.2	13.3	49.0	50.		
	Ratio (1 in X)	2,366	300	7,509	2,040	1,99		
	Population	2,871	2,731	23,361	2,092	31,05		
20.20	Number	3	23	15	6	4		
30-39	Rate	104.5	842.2	64.2	286.8	151.		
	Ratio (1 in X)	957	119	1,557	349	66		
	Population	2,420	2,755	24,651	2,026	31,85		
40.40	Number	8	38	26	6	7		
40-49	Rate	330.6	1,379.3	105.5	296.2	244.		
	Ratio (1 in X)	303	73	948	338	40		
	Population	1,501	2,509	31,171	1,471	36,65		
F0 F0	Number	7	45	28	12	9		
50-59	Rate	466.4	1,793.5	89.8	815.8	251.		
	Ratio (1 in X)	214	56	1,113	123	39		
	Population	1,379	2,720	57,246	1,690	63,03		
60.	Number	2	17	12	6	3		
60+	Rate	145.0	625.0	21.0	355.0	58.		
	Ratio (1 in X)	690	160	4,771	282	1,70		
	Population	17,286	20,065	199,934	15,081	252,36		
Total Females by	Number	21	138	84	31	27		
Race/Ethnicity	Rate	121.5	687.8	42.0	205.6	108.		
	Ratio (1 in X)	823	145	2,380	486	92		

### Section VIII - HIV Exposure Category

<u>Figure 11 – Proportion of Total People Aged 13+ Living with Diagnosed HIV, by Estimated Exposure Category, Race/Ethnicity, and Sex at Birth, Alive on December 31, 2018, Reported through June 30, 2019</u>



*Note*. Other exposure category and perinatal transmission not shown (<1 percent). Multiple imputation was used to estimate and adjust for missing transmission category.

<u>Table 16 – Reported HIV Diagnoses, Among People Aged 13+ During 2018, Linked to Care, Late Diagnosis, and First CD4 Test Result, by Estimated or Reported Exposure Category and Sex at Birth, Reported through June 30, 2019</u>

	Reported HIV Diagnoses Among Peop						
Estimated or Reported Exposure Category	N.a.	% of	Linked t	to Care	Late HIV Diagnoses		D4 Test sult
Category	No.	Total	% 1 mo.	% 3 mo.	%	% with Test	Median Count
Male-to-male Sexual Contact (MSM)	21	52.5%	91.9%	96.7%	***	91.9%	441
Injection Drug Use (IDU)	4	10.8%	***	***	***	***	***
Male-to-male Sexual Contact and Injection Drug Use (MSM/IDU)	3	7.8%	***	***	***	***	***
Heterosexual Contact (HET)	12	29.0%	87.1%	87.1%	***	84.5%	331
Perinatal Transmission	0	0.0%					
Other Exposure	0	0.0%					
No Estimated or Reported Exposure	0	0.0%					
Total	40	100.0%	87.5%	92.5%	15.0%	90.0%	436
Male Estimated or Reported Exposure Category							
Male-to-male Sexual Contact (MSM)	21	72.4%	91.9%	96.7%	***	91.9%	441
Injection Drug Use (IDU)	3	9.0%	***	***	***	***	***
Male-to-male Sexual Contact and Injection Drug Use (MSM/IDU)	3	10.7%	***	***	***	***	***
Heterosexual Contact (HET)	2	7.9%	***	***	***	***	***
Perinatal Transmission	0	0.0%					
Other Exposure	0	0.0%					
No Estimated or Reported Exposure	0	0.0%					
Total	29	100.0%	93.1%	96.6%	20.7%	93.1%	430
Female Estimated or Reported Exposure Category							
Injection Drug Use (IDU)	2	15.5%	***	***	***	***	***
Heterosexual Contact (HET)	9	84.5%	***	***	***	***	***
Perinatal Transmission	0	0.0%					
Other Exposure	0	0.0%					
No Estimated or Reported Exposure	0	0.0%					
Total	11	100.0%	72.7%	81.8%	0.0%	81.8%	479

Note. Data for 2018 are preliminary because they are based on a 6-month reporting delay and should not be used to assess trends. Data have been statistically adjusted to account for missing transmission category, therefore, values may not sum to column total. Median count is weighted based on statistical adjustment. For exposure category by gender, please see the Maryland HIV Epidemiological Profile Gender Expansive People Supplement.

<sup>\*\*\*</sup> Data withheld due to low population counts and/or small numbers

<u>Table 17 – People Aged 13+ Living with Diagnosed HIV, Alive on December 31, 2018, by Estimated or Reported Exposure Category and Sex at Birth, Reported through</u>
June 30, 2019

Estimated on Departed Evacuus Catagonia	Total People Aged 13+ Living with Diagnosed HIV			
Estimated or Reported Exposure Category	No.	% of Total		
Male-to-male Sexual Contact (MSM)	423	46.7%		
Injection Drug Use (IDU)	124	13.7%		
Male-to-male Sexual Contact and Injection Drug Use (MSM/IDU)	51	5.7%		
Heterosexual Contact (HET)	293	32.4%		
Perinatal Transmission	7	0.8%		
Other Exposure	2	0.2%		
No Estimated or Reported Exposure	5	0.6%		
Total	906	100.0%		
Male Estimated or Reported Exposure Category				
Male-to-male Sexual Contact (MSM)	423	66.5%		
Injection Drug Use (IDU)	70	11.0%		
Male-to-male Sexual Contact and Injection Drug Use (MSM/IDU)	51	8.1%		
Heterosexual Contact (HET)	83	13.0%		
Perinatal Transmission	6	0.9%		
Other Exposure	1	0.2%		
No Estimated or Reported Exposure	2	0.3%		
Total	636	100.0%		
Female Estimated or Reported Exposure Category				
Injection Drug Use (IDU)	 54	20.1%		
Heterosexual Contact (HET)	211	78.0%		
Perinatal Transmission	1	0.4%		
Other Exposure	1	0.4%		
No Estimated or Reported Exposure	3	1.1%		
Total	270	100.0%		

*Note.* Data have been statistically adjusted to account for missing transmission category, therefore, values may not sum to column total. For exposure category by gender, please see the Maryland HIV Epidemiological Profile Gender Expansive People Supplement.

<u>Table 18 – People Aged 13+ Living with Diagnosed HIV by Estimated or Reported Exposure Category, Race/Ethnicity, and Sex at Birth, Alive on December 31, 2018, and Reported through June 30, 2019</u>

		Total Peopl	e Aged 13+	Living with Diagn	osed HIV	
Estimated or Reported Exposure -			Race/	Ethnicity		
Category	Hispanic		Non-Hispai	nic, Black, only	Non-Hispanic, White, only	
	No.	% of Total	No.	% of Total	No.	% of Total
Male-to-male Sexual Contact (MSM)	39	46.2%	87	27.9%	250	59.9%
Injection Drug Use (IDU)	13	14.9%	48	15.3%	50	11.9%
Male-to-male Sexual Contact and Injection Drug Use (MSM/IDU)	3	3.6%	14	4.6%	32	7.6%
Heterosexual Contact (HET)	28	32.8%	156	49.9%	83	19.9%
Perinatal Transmission	1	1.2%	4	1.3%	1	0.2%
Other Exposure	0	0.0%	0	0.0%	1	0.2%
No Estimated or Reported Exposure	1	1.2%	3	1.0%	1	0.2%
Total	85	100.0%	312	100.0%	418	100.0%
Exposure Category  Male-to-male Sexual Contact (MSM)  Injection Drug Use (IDU)	39 10	61.4% 15.8%	87 31	48.8% 17.3%	250 24	75.0% 7.3%
Male-to-male Sexual Contact (MSM)						75.0%
Male-to-male Sexual Contact and Injection Drug Use (MSM/IDU)	3	4.8%	14	8.0%	32	9.5%
Heterosexual Contact (HET)	10	14.8%	41	23.1%	26	7.8%
Perinatal Transmission	1	1.6%	4	2.2%	0	0.0%
Other Exposure	0	0.0%	0	0.0%	1	0.3%
No Estimated or Reported Exposure	1	1.6%	1	0.6%	0	0.0%
Total	64	100.0%	178	100.0%	333	100.0%
Female Estimated or Reported Exposure Category						
Injection Drug Use (IDU)	3	12.4%	17	12.7%	25	29.9%
Heterosexual Contact (HET)	18	87.6%	115	85.8%	57	67.7%
Perinatal Transmission	0	0.0%	0	0.0%	1	1.29
Other Exposure	0	0.0%	0	0.0%	0	0.0%
No Estimated or Reported Exposure	0	0.0%	2	1.5%	1	1.29
Total	21	100.0%	134	100.0%	84	100.0%

*Note*. Data have been statistically adjusted to account for missing transmission category, therefore, values may not sum to column total. For exposure category by gender, please see the Maryland HIV Epidemiological Profile Gender Expansive People Supplement.

<u>Table 19 – CD4 Test Results During 2018 for People Aged 13+ Living with Diagnosed HIV, Alive on December 31, 2018, by Estimated or Reported Exposure Category,</u>
Reported through June 30, 2019

		To	tal People	Aged 13+ w	ith Living (	Diagnosed I	HIV		
Estimated or Reported Exposure		Recent CD4 Test Results							
Category	No.	No. with Test	% with Test	Median Count	<200	200- 349	350- 499	500+	
Male-to-male Sexual Contact (MSM)	423	337	79.8%	660	3.0%	11.4%	14.6%	71.0%	
Injection Drug Use (IDU)	124	100	80.5%	590	8.0%	9.6%	16.2%	66.3%	
Male-to-male Sexual Contact and Injection Drug Use (MSM/IDU)	51	43	82.9%	673	7.0%	7.3%	15.0%	70.7%	
Heterosexual Contact (HET)	293	239	81.4%	629	7.1%	7.9%	15.6%	69.4%	
Perinatal Transmission	7	***	***	***	***	***	***	***	
Other Exposure	2	***	***	***	***	***	***	***	
No Estimated or Reported Exposure	5	***	***	***	***	***	***	***	
Total	906	728	80.4%	647	5.4%	9.6%	15.2%	69.8%	

*Note*. Data have been statistically adjusted to account for missing transmission category, therefore, values may not sum to column total. Median count is weighted based on statistical adjustment.

<u>Table 20 – Viral Load Test Results During 2018 for People Aged 13+ Living with Diagnosed HIV, Alive on December 31, 2018, by Estimated or Reported Exposure Category, Reported through June 30, 2019</u>

	Total People Aged 13+ with Living Diagnosed HIV						
Estimated or Reported Exposure			Recent Viral Lo	ad Test Results			
Category	No.	No. with Test	% with Test	% Suppressed	Median Unsuppressed		
Male-to-male Sexual Contact (MSM)	423	334	78.9%	92.3%	22,953		
Injection Drug Use (IDU)	124	98	78.9%	79.0%	13,000		
Male-to-male Sexual Contact and Injection Drug Use (MSM/IDU)	51	41	80.5%	87.7%	2,580		
Heterosexual Contact (HET)	293	236	80.4%	85.7%	2,580		
Perinatal Transmission	7	***	***	***	***		
Other Exposure	2	***	***	***	***		
No Estimated or Reported Exposure	5	***	***	***	***		
Total	906	718	79.2%	87.9%	6,040		

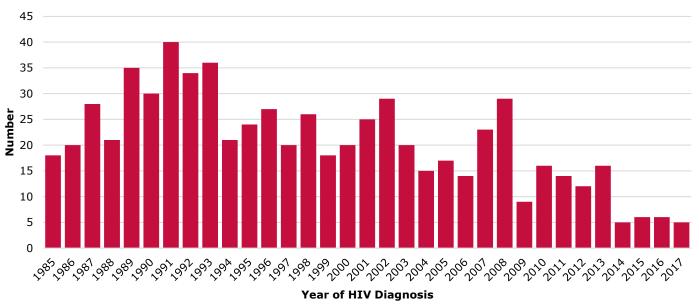
*Note*. Data have been statistically adjusted to account for missing transmission category, therefore, values may not sum to column total. Median unsuppressed is weighted based on statistical adjustment.

### Section IX - Disease Progression and Mortality

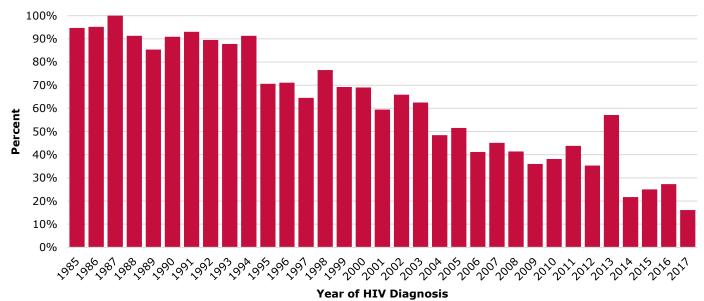
### <u>Figure 12 – Trends in Disease Progression by Year of HIV Diagnosis, 1985-2017, Reported through June 30, 2019</u>

Number of People Aged 13+ with Diagnosed HIV, Age 13+ at HIV Diagnosis, (Reported HIV Diagnoses Among People Aged 13+), Number of People Aged 13+ with Diagnosed HIV with an AIDS Diagnosis by December 31, 2018 (Reported AIDS Diagnoses), Percent by Year of HIV Diagnosis of Reported HIV Diagnoses with a Reported AIDS Diagnosis Among People Aged 13+ by December 31, 2018, the Average Years from HIV Diagnosis to AIDS Diagnosis for People with an AIDS Diagnosis, and the Percent by Year of HIV Diagnosis of Reported HIV Diagnoses with a Reported AIDS Diagnosis Among People Aged 13+ at 1 Year, 2 Years, 5 Years, and 10 Years after HIV Diagnosis, by Year of HIV Diagnosis from 1985 through 2017, Reported through June 30, 2019

### Number with AIDS by 12/31/2018



### Percent with AIDS by 12/31/2018

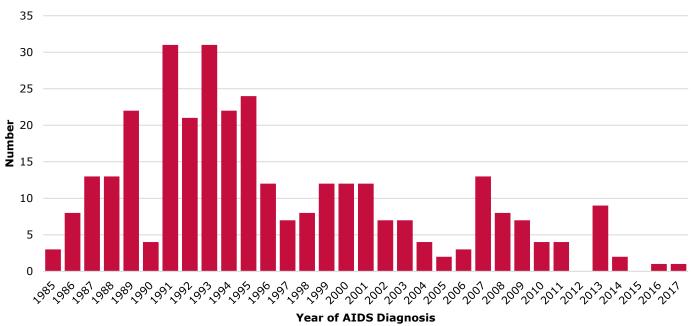


_			Reported HIV	Diagnoses Among				
Year of HIV		Re	ported AIDS Diag	Percei	Percent with AIDS by Years After HIV Diagnosis			
Diagnosis	No.			Mean Years			_	
Diagnosis		No.	% with AIDS	from HIV to AIDS	1 Year	2 Years	5 Years	10 Years
<1985	10	10	100.0%	5.9	50.0%	50.0%	60.0%	70.0%
1985	19	18	94.7%	7.0	21.1%	26.3%	47.4%	68.4%
1986	21	20	95.2%	4.5	47.6%	52.4%	57.1%	81.0%
1987	28	28	100.0%	4.9	42.9%	46.4%	57.1%	82.1%
1988	23	21	91.3%	5.3	39.1%	47.8%	60.9%	65.2%
1989	41	35	85.4%	2.9	48.8%	53.7%	65.9%	78.0%
1990	33	30	90.9%	4.4	24.2%	36.4%	66.7%	78.8%
1991	43	40	93.0%	3.3	48.8%	55.8%	69.8%	81.4%
1992	38	34	89.5%	2.9	42.1%	57.9%	76.3%	81.6%
1993	41	36	87.8%	2.2	56.1%	65.9%	78.0%	80.5%
1994	23	21	91.3%	3.4	56.5%	65.2%	69.6%	82.6%
1995	34	24	70.6%	3.7	41.2%	44.1%	50.0%	64.7%
1996	38	27	71.1%	2.5	44.7%	47.4%	60.5%	65.8%
1997	31	20	64.5%	3.4	38.7%	41.9%	45.2%	58.1%
1998	34	26	76.5%	1.4	64.7%	67.6%	67.6%	70.6%
1999	26	18	69.2%	2.7	42.3%	42.3%	61.5%	61.5%
2000	29	20	69.0%	2.3	48.3%	48.3%	58.6%	62.1%
2001	42	25	59.5%	1.4	42.9%	45.2%	52.4%	59.5%
2002	44	29	65.9%	2.6	38.6%	38.6%	56.8%	61.4%
2003	32	20	62.5%	2.7	40.6%	43.8%	46.9%	59.4%
2004	31	15	48.4%	1.1	41.9%	41.9%	45.2%	48.4%
2005	33	17	51.5%	1.5	33.3%	42.4%	45.5%	48.5%
2006	34	14	41.2%	1.5	29.4%	32.4%	38.2%	38.2%
2007	51	23	45.1%	0.5	41.2%	41.2%	45.1%	45.1%
2008	70	29	41.4%	1.3	30.0%	31.4%	37.1%	41.4%
2009	25	9	36.0%	1.4	28.0%	28.0%	32.0%	
2010	42	16	38.1%	0.7	33.0%	33.3%	35.7%	
2011	32	14	43.8%	0.3	43.8%	43.8%	43.8%	
2012	34	12	35.3%	1.3	26.5%	26.5%	29.4%	
2013	28	16	57.1%	0.4	50.0%	50.0%	57.1%	
2014	23	5	21.7%	0.5	17.4%	17.4%		
2015	24	6	25.0%	1.0	20.8%	20.8%		
2016	22	6	27.3%	0.7	18.2%	22.7%		
2017	31	5	16.1%	0.0	16.1%			
Total	1,110	689	62.1%	2.7	38.8%	42.3%	50.5%	56.8%
	=,===		02.270		55.575	12.0 / 0	20.070	

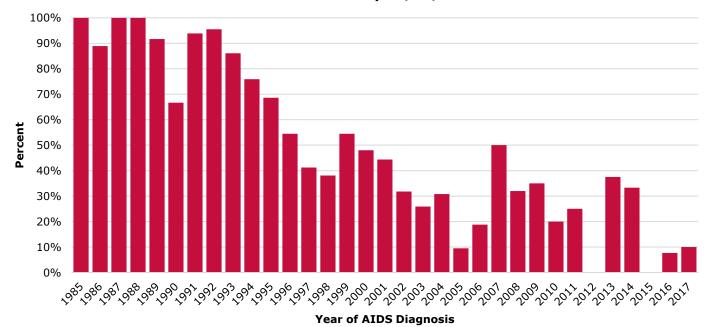
### <u>Figure 13 – Trends in Survival Times by Year of AIDS Diagnosis, 1985-2017, Reported through June 30, 2019</u>

Number of People Aged 13+ with Diagnosed HIV, Age 13+ at HIV Diagnosis, with an AIDS Diagnosis by December 31, 2017 (Reported AIDS Diagnoses), Number of Reported AIDS Diagnosis Among People Aged 13+ Reported to Have Died of Any Cause by December 31, 2018 (Reported AIDS Deaths), Percent by Year of AIDS Diagnosis of Reported AIDS Diagnoses with a Reported AIDS Death (Percent Dead) Among People Aged 13+ by December 31, 2018, the Average Years from AIDS Diagnosis to Death for People that have Died, and the Percent by Year of AIDS Diagnosis of Reported AIDS Diagnoses Among People Aged 13+ Not Reported to Have Died (Percent Alive) at 1 Year, 2 Years, 5 Years, and 10 Years after AIDS Diagnosis, by Year of AIDS Diagnosis from 1985 through 2017, Reported through June 30, 2019





#### Percent Deceased by 12/31/2018

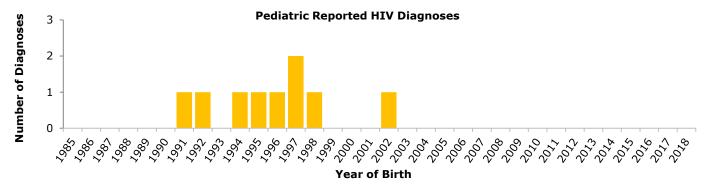


	Reported AIDS Diagnoses Among People Aged 13+								
Year of	_	R	eported AIDS	Deaths	Percent Alive by Years After AIDS Diagnosis				
AIDS	No.		%	Mean Years					
Diagnosis	NO.	No.	Deceased	from AIDS to Death	1 Year	2 Years	5 Years	10 Years	
<1985	6	6	100.0%	1.4	33.3%	16.7%	16.7%	0.0%	
1985	3	3	100.0%	1.0	66.7%	0.0%	0.0%	0.0%	
1986	9	8	88.9%	0.7	22.2%	11.1%	11.1%	11.1%	
1987	13	13	100.0%	1.2	38.5%	23.1%	7.7%	0.0%	
1988	13	13	100.0%	2.1	69.2%	23.1%	15.4%	0.0%	
1989	24	22	91.7%	3.2	70.8%	45.8%	25.0%	12.5%	
1990	6	4	66.7%	5.0	83.3%	66.7%	50.0%	50.0%	
1991	33	31	93.9%	3.0	75.8%	51.5%	27.3%	15.2%	
1992	22	21	95.5%	4.4	77.3%	63.6%	27.3%	22.7%	
1993	36	31	86.1%	3.7	75.0%	58.3%	27.8%	22.2%	
1994	29	22	75.9%	4.8	82.8%	48.3%	44.8%	37.9%	
1995	35	24	68.6%	6.7	82.9%	77.1%	68.6%	51.4%	
1996	22	12	54.5%	6.8	86.4%	86.4%	81.8%	59.1%	
1997	17	7	41.2%	7.8	100.0%	94.1%	82.4%	70.6%	
1998	21	8	38.1%	7.0	95.2%	95.2%	85.7%	66.7%	
1999	22	12	54.5%	7.0	100.0%	90.9%	81.8%	54.5%	
2000	25	12	48.0%	6.4	84.0%	84.0%	76.0%	72.0%	
2001	27	12	44.4%	5.9	96.3%	92.6%	77.8%	63.0%	
2002	22	7	31.8%	3.1	86.4%	86.4%	72.7%	68.2%	
2003	27	7	25.9%	4.5	88.9%	88.9%	88.9%	74.1%	
2004	13	4	30.8%	8.3	100.0%	100.0%	92.3%	84.6%	
2005	21	2	9.5%	5.5	95.2%	95.2%	95.2%	95.2%	
2006	16	3	18.8%	4.1	93.8%	93.8%	87.5%	81.3%	
2007	26	13	50.0%	5.6	92.3%	92.3%	84.6%	50.0%	
2008	25	8	32.0%	4.4	88.0%	88.0%	88.0%	68.0%	
2009	20	7	35.0%	4.2	90.0%	90.0%	85.0%		
2010	20	4	20.0%	3.5	95.0%	90.0%	90.0%		
2011	16	4	25.0%	1.8	87.5%	87.5%	75.0%		
2012	14	0	0.0%		100.0%	100.0%	100.0%		
2013	24	9	37.5%	1.0	75.0%	66.7%	66.7%		
2014	6	2	33.3%	0.2	66.7%	66.7%			
2015	5	0	0.0%		100.0%	100.0%			
2016	13	1	7.7%	0.8	92.3%	92.3%			
2017*	10	1	10.0%	0.7	90.0%	-			
Total	641	333	52.0%	4.3	84.1%	75.5%	65.7%	54.4%	

<sup>\*2017</sup> AIDS deaths are preliminary

### **Section X - Pediatrics**

Figure 14 – Trends in Reported HIV Diagnoses Among People Aged <13, 1985-2018, Reported through June 30, 2019



Number of Pediatric HIV Diagnoses, Age <13 at HIV Diagnosis, (Pediatric Reported HIV Diagnoses) by Year of Birth, by Year of HIV Diagnosis, by Year of AIDS Diagnosis, and by Year of Death Due to Any Cause, and Number of Children with Diagnosed HIV, Age <13 at HIV Diagnosis, and Not Reported to have Died as of December 31st of Each Year (Total Living Pediatric Diagnoses) from 1985 through 2018, as Reported by Name through June 30, 2019

		Total Living Pediatric			
Year	No. by Year of Birth	No. by Year of HIV Diagnosis	No. by Year of AIDS Diagnosis	No. by Year of Death	Diagnoses Alive on December 31st of Each Year
<1985	3	0	0	0	
1985	0	1	0	0	1
1986	0	1	0	0	2
1987	0	0	0	0	2
1988	0	1	0	0	3
1989	0	0	1	0	3
1990	0	0	0	0	3
1991	1	0	0	1	4
1992	1	1	1	0	5
1993	0	1	1	0	6
1994	1	0	1	2	4
1995	1	1	0	0	5 5
1996	1	1	1	1	5
1997	2	2	1	0	7
1998	1	0	0	0	7
1999	0	0	0	0	7
2000	0	0	0	0	7
2001	0	0	0	0	7
2002	1	0	0	0	7
2003	0	0	0	0	7
2004	0	0	0	0	7
2005	0	0	1	0	6
2006	0	0	0	0	6
2007	0	1	0	0	7
2008	0	2	0	0	9
2009	0	0	0	0	9
2010	0	0	0	0	9
2011	0	0	0	0	9
2012	0	0	0	1	9
2013	0	0	0	0	10
2014	0	0	0	1	9
2015	0	0	0	0	9
2016	0	0	0	0	9
2017	0	0	0	0	9
2018	0	0	0	0	9
Total	12	12	7	6	

<u>Table 21 – People Aged <13 Living with Diagnosed HIV, Alive on December 31, 2018, by Jurisdiction of Current Residence, Reported through June 30, 2019</u>

Jurisdiction of Current Residence	Total People Aged <13 Living with Diagnosed HIV				
Julisdiction of Current Residence	No.	% of Total			
Allegany	2	50.0%			
Frederick	1	25.0%			
Garrett	0	0.0%			
Washington	1	25.0%			
Total	4	100.0%			

<u>Table 22 – People Aged <13 Living with Diagnosed HIV, Alive on December 31, 2018, by Sex at Birth and Race/Ethnicity, Reported through June 30, 2019</u>

Dama annualis Obana atanistis	Total People Aged <13 Living with Diagnosed HIV				
Demographic Characteristic ——	No.	% of Total			
Sex at Birth					
Male	0	0.0%			
Female	4	100.0%			
Race/Ethnicity					
Hispanic	0	0.0%			
Non-Hispanic	4	100.0%			
American Indian/Alaska Native, only	0	0.0%			
Asian, only	0	0.0%			
Black, only	4	100.0%			
Native Hawaiian/Other Pacific Islander, only	0	0.0%			
White, only	0	0.0%			
Multiracial/Other	0	0.0%			
Total	4	100.0%			

### **Glossary of Terms**

Age at AIDS Diagnosis: Age group at time of initial AIDS diagnosis.

Age at HIV Diagnosis: Age group at time of initial HIV diagnosis.

Age on [date]: Age group of people living with diagnosed HIV on the specified date.

Another Gender Identity: All other gender identities or gender expressions.

**CD4 Result Distribution (<200, 200-349, 350-499, 500+):** Percent of people living with diagnosed HIV with a CD4 test distributed by their CD4 count results (cells per microliter).

**CD4 With Test:** Number and percent of total people aged 13+ living with diagnosed HIV with a recent CD4 test result.

Corrections: Residence in a state or federal prison. Does not include local jails and detention centers.

Current Residence: Jurisdiction of residence from the most recent report since January 1, 2009.

**First CD4 Test Result Median Count:** Median CD4 count (cells per microliter) of the first CD4 test result reported within 12 months following initial HIV diagnosis.

**First CD4 Test Result Percent with Test:** Percent of reported HIV diagnoses among people aged 13+ with the first CD4 test result reported within 12 months following the initial HIV diagnosis.

**Gender Expression:** People's outward presentation of their gender which may or may not conform to socially defined behaviors and characteristics typically associated with being either masculine or feminine.

**Gender Identity:** Refers to one's internal understanding of one's own gender, or the gender with which a person identifies.

**Jurisdiction of Current Residence:** Jurisdiction of residence from the most recent report since January 1, 2009.

Jurisdiction of Residence: Jurisdiction of residence at diagnosis or current residence.

Jurisdiction of Residence at AIDS Diagnosis: Jurisdiction of residence at time of initial AIDS diagnosis.

**Jurisdiction of Residence at Diagnosis:** Jurisdiction of residence at the later time of initial HIV diagnosis or time of initial AIDS diagnosis.

Jurisdiction of Residence at HIV Diagnosis: Jurisdiction of residence at time of initial HIV diagnosis.

**Late HIV Diagnosis:** Percent of adult/adolescent reported HIV diagnoses with an initial AIDS diagnosis less than or equal to 3 months after their initial HIV diagnosis.

**Linked to Care:** Percent of adult/adolescent reported HIV diagnoses with a reported CD4 or viral load test performed less than or equal to 1 month or 3 months after their initial HIV diagnosis.

**People Aged 13+ Living with Diagnosed HIV:** Reported HIV diagnoses, age 13 years or older as of December 31<sup>st</sup> of the specified year and not reported to have died as of December 31<sup>st</sup> of the specified year.

**People Living with Diagnosed HIV:** Reported HIV diagnoses not reported to have died as of December 31<sup>st</sup> of the specified year.

**Mean Years from HIV Diagnosis:** Mean or average number of years from initial HIV diagnosis to initial AIDS diagnosis for people living with a reported AIDS diagnosis.

**Mean Years from AIDS diagnosis to AIDS Death:** Mean or average number of years from initial AIDS diagnosis to death for adult/adolescent reported AIDS diagnoses with a reported death.

**Median Count:** Median CD4 count (cells per microliter), among total people aged 13+ living with diagnosed HIV, of the most recent CD4 test result measured in the specified year.

**Median Unsuppressed:** Median unsuppressed viral load (copies per milliliter) among people aged 13+ living with diagnosed HIV of the most recent viral load test result measured in the specified year of 200 copies per milliliter or greater.

**Percent Change:** The percent change in number of total people aged 13+ living with diagnosed HIV from residence at diagnosis to current residence.

**Percent Alive by Years after AIDS Diagnosis:** Percent of adult/adolescent reported AIDS diagnoses not reported to have died at 1 year, 2 years, 5 years and 10 years after initial AIDS diagnosis, by year of AIDS diagnosis.

**Percent Late HIV Diagnosis:** Percent of adult/adolescent reported AIDS diagnoses with an initial HIV diagnosis less than or equal to 3 months prior to their initial AIDS diagnosis.

**Percent Suppressed:** Percent of total people aged 13+ living with diagnosed HIV with a recent viral load test result measured in the specified year of less than 200 copies per milliliter.

**Percent with AIDS by Years after HIV Diagnosis:** Percent of adult/adolescent reported HIV diagnoses in the specified year with an initial AIDS diagnosis at 1 year, 2 years, 5 years and 10 years after HIV diagnosis.

**Perinatal HIV Transmission Percent:** Percent of confirmed perinatal HIV transmissions among reported perinatal HIV exposures by year of birth.

**Perinatal HIV Transmission Rate:** Number of confirmed perinatal HIV transmissions divided by the number of live births multiplied by 100,000 by year of birth.

**Population:** Population estimate for July 1, 2018.

**Population Age 13+:** Population age 13 years or older, estimate for July 1, 2018.

Rate: Number of people living with diagnosed HIV divided by the population and multiplied by 100,000.

**Ratio (1 in X):** Number of people for every 1 person living with diagnosed HIV in the population, or 1 person living with diagnosed HIV in every X number of people.

Recent CD4 Test Result: The most recent CD4 test result measured in the specified year.

Recent Viral Load Test Result: The most recent viral load test result measured in the specified year.

**Reported AIDS Deaths:** Reported HIV diagnoses with an AIDS diagnosis, reported to have died of any cause during the specified year.

Reported AIDS Diagnoses: Reported HIV diagnoses with an initial AIDS diagnosis during the specified year.

**Reported AIDS Diagnoses Among People Aged 13+:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial AIDS diagnosis during the specified year.

Reported HIV Diagnoses: Reported HIV diagnoses with an initial HIV diagnosis during the specified year.

**Reported HIV Diagnoses Among People Aged 13+:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial HIV diagnosis during the specified year.

**Residence at Diagnosis:** Jurisdiction of residence at later time of initial HIV diagnosis or initial AIDS diagnosis.

**Retained in HIV Care:** HIV diagnosed with a reported CD4 or viral load test result performed or reported antiretroviral use in the specified year.

**Suppressed Viral Load:** HIV diagnosed with the most recent viral load measured in the specified year of less than 200 copies per milliliter.

**Total People Aged 13+ Living with Diagnosed HIV:** Reported HIV diagnoses, age 13 years or older as of December 31<sup>st</sup> of the specified year not reported to have died as of December 31<sup>st</sup> of the specified year.

**Total People Aged <13 Living with Diagnosed HIV:** Reported HIV diagnosis, age less than 13 years at HIV diagnosis and not reported to have died as of December 31<sup>st</sup> of the specified year.

**Total People Living with Diagnosed HIV:** Reported HIV diagnoses not reported to have died as of December 31<sup>st</sup> of the specified year.

Transgender Female: A person whose sex assigned at birth is male but who identify as a woman.

**Transgender Male:** A person whose sex assigned at birth is female but who identify as a man.

**Viral Load With Test:** Number and percent of total people aged 13+ living with diagnosed HIV with a recent viral load test result.

**Women of Childbearing Age Living with Diagnosed HIV:** Reported HIV diagnoses among women of childbearing age (13-49 years old).